

ORANGE COUNTY WATER DISTRICT
APPLICATION TO APPROPRIATE
SANTA ANA RIVER WATER

Final Program Environmental Impact Report
Response to Comments
SCH # 2002081024

Prepared for:
Orange County Water District

July 2006



ORANGE COUNTY WATER DISTRICT APPLICATION TO APPROPRIATE SANTA ANA RIVER WATER

Final Program Environmental Impact Report
Response to Comments
SCH # 2002081024

Prepared for:
Orange County Water District

July 2006

Prepared by:
ESA
707 Wilshire Boulevard
Suite 1450
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

Oakland

Orlando

Sacramento

San Francisco

Seattle

Tampa

202291



TABLE OF CONTENTS

Orange County Water District Application to Appropriate Santa Ana River Water

Final Program Environmental Impact Report

Response to Comments

	<u>Page</u>
1 Introduction	1
2 Comment Letters	2
3 Response to Comments	35
4 Summary of Modifications to the Draft PEIR	54

CHAPTER 1

Introduction

The Orange County Water District (OCWD) prepared a Recirculated Draft Program Environmental Impact Report (PEIR) for the Application to Appropriate Santa Ana River Water. The document was completed and released for public review on March 30, 2006 pursuant to California Environmental Quality Act (CEQA) requirements. The public review period officially closed on May 30, 2006. A total of 11 comment letters were received on the Recirculated Draft PEIR.

This Response to Comments document provides copies of comments received and responses to these comments. Chapter 2 provides copies of all the comment letters. Chapter 3 includes responses to each comment. Chapter 4 compiles changes made to the Draft PEIR in response to comments received. The comments are referenced numerically by letter and comment number; the comment letters are numbered in sequential order. For example, the first comment in Letter 1 (Orange County Fire Authority) is 1-1. **Table 1** lists agencies that submitted comments on the Recirculated Draft PEIR during the comment period.

The Final PEIR for the Orange County Water District's Application to Appropriate Santa Ana River Water is comprised of the Recirculated Draft EIR as amended by this document (as compiled in Chapter 4) and this Response to Comments document.

TABLE 1
LIST OF COMMENTS RECEIVED ON THE RECIRCULATED DRAFT PEIR

ID NO.	DATE OF LETTER/ COMMENTS	COMMENTORS	COMMENTORS AGENCIES/ORGANIZATION/ INTERESTED PARTIES	RESPONSE PAGE NO.
1	April 7, 2006	Michelle Hernandez	Orange County Fire Authority	34
2	April 28, 2006	Robert F. Joseph	Department of Transportation District 12	34
3	May 15, 2006	Brian Wallace	Southern California Association of Governments	35
4	May 15, 2006	John L. Vrymoed	California Department of Water Resources	35
5	May 23, 2006	David A. Ludwin	Orange County Sanitation District	36
6	May 30, 2006	Michael T. Fife	Chino Basin Watermaster	36
7	May 30, 2006	Adam Keats	Center for Biological Diversity	37
8	May 30, 2006	Jane Farwell	California State Water Resources Control Board	40
9	May 30, 2006	Alice Angus	City of Orange	49
10	May 31, 2006	Meredith Clement	San Bernardino Valley Municipal Water District	53
11	June 7, 2006	Alice Angus	City of Orange	54

CHAPTER 2

Comment Letters



ORANGE COUNTY FIRE AUTHORITY

P.O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Rd., Irvine, CA 92602

Chip Prather, Fire Chief

www.ocfa.org

(714) 573-6000

April 7, 2006

OC Water District
Craig Miller
10500 Ellis Ave
Fountain Valley, CA 92708

SUBJECT: Re-circulated DEIR Appropriation of Santa Ana River Water

Dear Mr. Miller:

Thank you for the opportunity to review the subject document. Given the nature of the project the impact to the OCFA are not significant. While no additional public safety resources are anticipated as a result of this project, all standard conditions and guidelines will be applied to the project during the normal plan review process. The following mitigation is requested to mitigate the delays in traffic for emergency response:

- All traffic signals on public access ways in the vicinity, which have been identified as required to be upgraded, should include the installation of optical preemption devices.
- All new or upgradeable electric vehicle access gates on the property shall install emergency opening devices as approved by the Orange County Fire Authority.

1-1

Thank you for providing us with this information. Please contact me at 714-573-6199 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michele Hernandez".

Michele Hernandez
Management Analyst, Strategic Services
SR# 107084

Serving the Cities of: Aliso Viejo • Buena Park • Cypress • Dana Point • Irvine • Laguna Hills • Laguna Niguel • Laguna Woods • Lake Forest • La Palma • Los Alamitos • Mission Viejo • Placentia • Rancho Santa Margarita • San Clemente • San Juan Capistrano • Seal Beach • Stanton • Tustin • Villa Park • Westminster • Yorba Linda • and Unincorporated Areas of Orange County

RESIDENTIAL SPRINKLERS AND SMOKE DETECTORS SAVE LIVES

Comment Letter 2

DEPARTMENT OF TRANSPORTATION

DISTRICT 12
 3337 MICHELSON DRIVE
 SUITE C380
 IRVINE, CA 92612-1699
 PHONE (949) 724-2000



Flex your power!
 Be energy efficient!

RECEIVED
 MAY 11 2006
 ACCOUNTING DEPT.

April 28, 2006

Mr. Rick Mendoza, Senior Engineer
 Orange County Water District
 10500 Ellis Avenue
 Fountain Valley, CA 92708

IGR/CEQA
 SCH#2002081024
 Recirculated DEIR
 Log# 1114C
 SR55, 22,91,71,405,5

Dear Mr. Mendoza:

Subject: Orange County Water District (OCWD) Recirculated DEIR

Thank you for the opportunity to review and comment on the **Recirculated draft Environmental Impact Report (DEIR) for the Orange County Water District (OCWD) Santa Ana River Project**. The OCWD has filed an application to the State Water Resources Control Board (SWRCB) to appropriate water from the Santa River, which flows through portions of San Bernardino, Riverside, and Orange Counties. The OCWD has submitted an Application to Appropriate SAR water to the SWRCB to confirm the District's rights to the 42,000 afy base flow plus any additional storm flows reaching Prado Dan in conformance with the 1969 Stipulated Judgement.

Caltrans District 12 is a reviewing agency and has the following comments:

1. Measures must be incorporated to contain all vehicle loads and avoid any tracking of materials, which may fall or blow onto Caltrans roadways or facilities. Please note that all projects involving soil disturbance activities should pay extra attention to storm water pollution control during the "Rainy Season" (October 1st – April 30th) and follow the Water Pollution Control BMPs to minimize impact to the receiving waters. 2-1
2. Due to the proximity of the Santiago Creek Expanded Recharge Project to SR-22 the Environmental Document should identify any and all potential permanent and temporary impacts to SR-22, including but not limited to, visual (lighting, signage, etc.) traffic (access to ramps), grading and storm water runoff. 2-2
3. On page 4.7-6, a mitigation measure (M-CULT-2) is listed detailing plans for a qualified architectural historian to survey Hart Park parking area and to determine its historical significance. Caltrans wishes to inform OCWD that Caltrans has recently completed a cultural study at this same project location. This cultural study may contain information pertinent to OCWD's upcoming analysis. A copy of this report (Historic Property Survey Report, Santiago Creek Bike Trail Project, April 2005) can be made available upon request. 2-3

Rick Mendoza
April 28, 2006
Page 2

Please continue to keep us informed of projects that may impact our State Transportation Facilities. If you have any questions or comments, please contact Lynne Gear (949) 724-2241.

Sincerely,

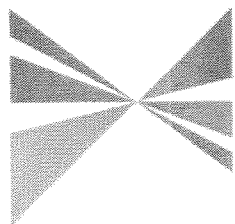
A handwritten signature in black ink, appearing to read "Robert F. Joseph". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Robert F. Joseph, Chief
IGR/Community Planning

cc: Terri Pencovic, Headquarters
Terry Roberts, OPR
Leslie Manderscheid, Environmental Planning

Comment Letter 3

SOUTHERN CALIFORNIA



ASSOCIATION of
GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

(213) 236-1800

(213) 236-1825

www.scag.ca.gov

Officers: President: Yvonne B. Burke, Los Angeles County • First Vice President: Gary Overt, San Bernardino County • Second Vice President: Richard Doon, Lake Forest • Immediate Past President: Joni Young, Port Hueneme

Imperial County: Victor Carrillo, Imperial County • Hon Edney El Centro

Los Angeles County: Yvonne B. Burke, Los Angeles County • Zev Yanofsky, Los Angeles County • Jim Aldinger, Manhattan Beach • Harry Baldwin, San Gabriel • Paul Braden, Cerritos • Todd Campbell, Burbank • Tony Cardenas, Los Angeles • Stan Carroll, La Habra Heights • Margaret Clark, Rosemead • Gene Daniels, Paramount • Mike Dispensa, Palmdale • Judy Dunlap, Inglewood • Rae Gabelich, Long Beach • David Gelin, Downey • Eric Gaswell, Los Angeles • Wendy Giesel, Los Angeles • Frank Gurule, Gardena • Janice Hahn, Los Angeles • Ladore Hahn, Compton • Keith W. Hanks, Azusa • Josh Hulsai, Los Angeles • Lori Lanning, Los Angeles • Paula Lantz, Pomona • Paul Nowatka, Torrance • Liam O'Connor, Santa Monica • Alex Padilla, Los Angeles • Renato Parks, Los Angeles • Jan Perry, Los Angeles • Ed Reyes, Los Angeles • Bill Rosendahl, Los Angeles • Greg Smith, Los Angeles • Lori Sykes, Walnut • Paul Tathar, Alhambra • Mike Teo, South Pasadena • Tomia Reyes-Changa, Long Beach • Antonio Villarreal, Los Angeles • Dennis Washburn, Calabasas • Erik Weiss, Los Angeles • Herb J. Wesson, Jr., Los Angeles • Dennis Zlow, Los Angeles

Orange County: Chris North, Orange County • Christine Barnes, La Palma • John Beaumanoir, Brea • Lou Bone, Tustin • Art Brown, Buena Park • Richard Chavez, Anaheim • Debbie Cook, Huntington Beach • Leslie Daigle, Newport Beach • Richard Dixon, Lake Forest • Paul Glash, Laguna Hills • Marilene Pae, Los Alamitos

Riverside County: Jeff Stone, Riverside County • Thomas Buckles, Lake Elsinore • Bonnie Hinkler, Moreno Valley • Ron Lowbridge, Riverside • Greg Pettis, Cathedral City • Ron Roberts, Temecula

San Bernardino County: Gary Overt, San Bernardino County • Lawrence Gale, Barstow • Paul Eaton, Montclair • Lee Ann Garcia, Grand Terrace • Tim Lasper, Town of Apple Valley • Lissy McAllister, Highland • Deborah Robertson, Rialto • Alan Wupfel, Ontario

Ventura County: Jody Mikels, Ventura County • Glen Becerra, Simi Valley • Carl Morehouse, San Buenaventura • Joni Young, Port Hueneme

Orange County Transportation Authority: Lou Correa, County of Orange

Riverside County Transportation Commission: Brian Crow, Hemet

Ventura County Transportation Commission: Keith Millhouse, Moorpark

15 May 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

RE: Comments on the Notice of Availability of a Recirculated Draft Program Environmental Impact Report for the Orange County Water District Application to Appropriate Santa Ana River Water
SCAG No. I20060224

Dear Mr. Miller:

Thank you for submitting the Notice of Completion of a Draft Environmental Report for the above-mentioned project to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

Based on the information provided in the Recirculated EIR we have no further comments.

A description of the proposed project was published in the April 1-15, 2006 Intergovernmental Review Clearinghouse Report for public review and comment.

If you have any questions, please contact me at (213) 236-1851. Thank you.

Sincerely,

Brian Wallace
Associate Regional Planner
Intergovernmental Review

3-1

DOCS # 122003

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



MAY 15 2006

1. Ms. Nadell Gayou
Resources Agency Project Coordinator
Environmental Review Section, DPLA
901 P Street
Sacramento, California 95814
2. Mr. Craig Miller
Orange County Water District
Post Office Box 8300
Fountain Valley, California 92728-8300

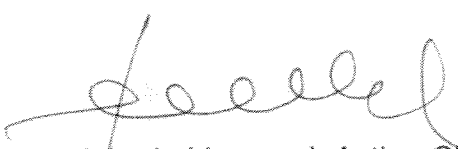
SCH #2002081024, Notice of Completion and Environmental Document Transmittal for Orange County Water District Application to Appropriate Santa Ana River Water, March 30, 2006, Orange County

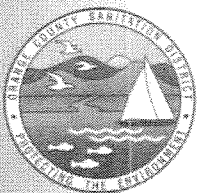
The Division of Safety of Dams has reviewed the Orange County Water District Santa Ana River Water Re-circulated Draft Program Environmental Impact Report.

Based on the information provided, we could not determine if the proposed near-term recharge basins, and long-term recharge facilities and off-river storage reservoirs are under State jurisdiction for safety. Sections 6002 and 6003 of the California Water Code define that dams 25 feet or higher having a reservoir storage capacity of more than 15 acre-feet, and dams higher than six feet having a storage capacity of 50 acre-feet or more, are under State jurisdiction. Jurisdictional height of a dam is the vertical distance measured from the lowest point at the downstream toe of the dam to its maximum storage elevation.

If the proposed recharge basins or off-river storage reservoirs are subject to State jurisdiction, a construction application for each project, together with plans and specifications, must be filed with the Division of Safety of Dams. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the supervision of a civil engineer registered in California. John Vrymoed, Design Engineering Branch Chief, is responsible for application approval process and can be reached at (916) 227-4660.

If you have any questions, you may contact Office Engineer Chuck Wong at (916) 227-4601 or Regional Engineer Mutaz Mihyar at (916) 227-4600.


John L. Vrymoed, Acting Chief
Division of Safety of Dams
(916) 227-9800



Comment Letter 5

ORANGE COUNTY SANITATION DISTRICT

May 23, 2006

Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

SUBJECT: Draft Program Environmental Impact Report for the Orange
County Water District Application to Appropriate Santa Ana River
Water

This letter is in response to the above referenced Draft Environmental Impact
Report (Project).

It is the Orange County Sanitation District's (OCSD) request that the Orange
County Water District (OCWD) confirm that all approvals and rights to be
granted through the Project shall not supersede past agreements. These
agreements include but are not limited to:

- November 12, 2002 – Agreement between OCSD and OCWD titled
"Joint Exercise of Powers Agreement for the Development, Operation,
and Maintenance of the Ground Water Replenishment and Green
Acres Project"
- October 15, 2003 – "Amendment No. 1 Joint Exercise of Powers
Agreement for the Development, Operation, and Maintenance of the
Ground Water Replenishment and Green Acres Project"
- April 26, 2006 - "Amendment No. 2 Joint Exercise of Powers
Agreement for the Development, Operation, and Maintenance of the
Ground Water Replenishment and Green Acres Project"

Thank you for the opportunity to comment on this EIR. Please contact Adam
Nazaroff at (714) 593-7854 if you have any questions.

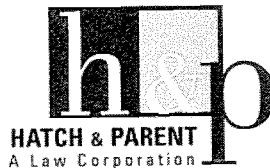
David A. Ludwin, P.E.
Director of Engineering

AN:sa

H:\dept\eng\740 Planning\EIRS\2006\2006037_OCWD_Santa Ana River Water Reappropriation.doc

c: Adam Nazaroff
Wendy Sevenandt
EIR File

Comment Letter 6



21 East Carrillo Street
Santa Barbara, CA 93101
Telephone: (805) 963-7000
Fax: (805) 965-4333

Michael T. Fife
(805) 882-1453
MFife@HatchParent.com

May 30, 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

Dear Mr. Miller:

Thank you for the opportunity to provide the comments to Orange County Water District's ("OCWD") Recirculated Draft PEIR to assess potential environmental effects of OCWD's Application to Appropriate Water from the Santa Ana River. The following comments are submitted on behalf of the Chino Basin Watermaster ("Watermaster").

Watermaster appreciates the clear affirmation in the PEIR of the management regime for the Santa Ana Watershed that is created through the 1969 Judgment. The PEIR acknowledges that upstream water agencies' concerns about the effects of OCWD's proposed water rights application on upstream water rights and water management operations is a major area of controversy regarding OCWD's application. (PEIR 1-13.) This concern stems, in part, from the fact that the water identified as available for appropriation by OCWD's application is in some instances the same water identified by the upstream entities' applications as available for appropriation by the upstream entities. The PEIR provides assurances that the project analyzed by the PEIR does not involve any impacts that might be associated with some type of guarantee to OCWD of flows beyond those guaranteed by the 1969 Judgment. If the result of the application process were to involve some type of guarantees of flows beyond those guaranteed by the 1969 Judgment, then the "project" described by the PEIR would involve impacts not analyzed by the PEIR.

6-1

As a point of clarification, we should note that the PEIR at times lacks precision concerning the description of OCWD's rights under the 1969 Judgment as it relates to flows that pass Prado Dam. The 1969 Judgment grants OCWD a guarantee that 42,000 AFY will flow past the specific geographic location of Prado Dam. Under the 1969 Judgment, OCWD has the right to this 42,000 AF, plus any additional flows that pass by Prado Dam. The PEIR, however, sometimes describes OCWD's rights under the 1969 Judgment to involve water that reaches the "Prado Dam conservation pool." For example, in the description of the objectives of the project, the PEIR states: "The Application . . . was submitted to establish the rights to base and storm flows in excess of the 42,000 afy, to a maximum of 505,000 afy, that reach the **Prado Dam**

6-2

conservation pool. The District is not requesting any mandate of releases to create flows beyond those granted in the 1969 Stipulated Judgment, but seeks a right to capture the SAR flow that does reach **Prado Dam** each year." (PEIR 1-8.) OCWD's rights under the 1969 Judgment are defined by flows at Prado Dam, and not by the Prado Dam conservation pool. Watermaster believes this clarification has no effect on the analysis in the PEIR and offers the comment merely for the sake of accuracy.

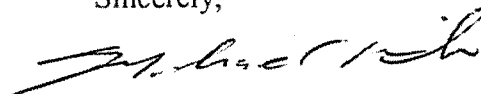
6-2
(cont.)

Watermaster appreciates the inclusion in the revised PEIR of an analysis of cumulative effects of the project in combination with projects proposed by upstream entities and fully agrees with the conclusion of the PEIR that, "... no cumulative effects to base flow would result from the OCWD diversions combined with proposed upstream reclamation projects." (PEIR 7-8.)

6-3

Watermaster looks forward to continuing to work with OCWD and the other upstream entities through not only the water rights application process, but in the overall management of the Santa Ana River Watershed.

Sincerely,



Michael T. Fife
For HATCH & PARENT
A Law Corporation

MXF: rrr



CENTER FOR BIOLOGICAL DIVERSITY

May 30, 2006

via facsimile and first class mail

Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708
Phone: 714-378-3200
Fax: 714-378-3373

**RE: Orange County Water District Application to Appropriate Santa Ana River Water -
Recirculated Draft Program Environmental Impact Report SCH #2002081024**

Dear Mr. Miller:

The Center for Biological Diversity ("the Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 22,000 members throughout California and the United States. The Center submits the following comments on the Recirculated Draft Program Environmental Impact Report ("DPEIR") for the Orange County Water District Application to Appropriate Santa Ana River Water State Clearinghouse #2002081024 ("the project") on behalf of our members, staff, and members of the public with an interest in protecting the native species and habitats along the Santa Ana River.

The Center contends that the DPEIR still fails to identify and adequately analyze potential environmental impacts for all of the proposed projects and fails to provide adequate alternatives that would avoid those impacts or include enforceable mitigation measures to minimize those impacts, as required by law. The application for 505,000 af/y of native Santa Ana River (SAR) water is not fully analyzed and in compliance with the California Environmental Quality Act (CEQA). The Center strongly urges the Orange County Water District ("OCWD") to seek a water rights application only for the proposed projects that currently have project-level CEQA analysis in this DPEIS. If the OCWD submits an application for additional water, then we contend these projects need to be fully analyzed in an updated and recirculated DPEIR.

7-1

Tucson • Phoenix • San Francisco • San Diego • Los Angeles • Joshua Tree • Pinos Altos • Portland • Washington, DC

Adam F. Keats, Staff Attorney • 1095 Market St., Suite 511 • San Francisco, CA 94103
Phone: 415-436-9682 x304 • Fax: 415-436-9683 • akeats@biologicaldiversity.org

A. The DPEIR Improperly Defers CEQA Mandated Environmental Review and Mitigation.

1. Adequacy of Water Availability for the Application.

We question the need for a water rights application for 505,000 ac/y. Figure ES-1 (DPEIS at Page ES-5) does not support the availability of 505,000 ac/y of "native" SAR water. That amount is more than double the acre-feet/year of water that is currently available. We question the adequacy of the analysis that 505,000 af/y of "native" SAR water will be available in the future for the Orange County Water District ("OCWD") to acquire. Thirty years of water flow data do not fully represent the cyclical nature of hydrological processes in southern California. We contend a much more comprehensive data set is necessary to adequately establish native SAR flows. From those data, a more realistic amount of water can be determined that may be available for water rights applications.

7-2

To date the greatest amount of water in a single year that has been available for the OCWD to divert was 237,000 af (DPEIS at Page ES-2). This amount is below the current recharge capacity of 250,000 af/y of OCWD's existing facilities (DPEIS at Page ES-3). On average currently there is only enough "native" SAR water to provide 184,000 af/y for recharge (DPEIS at Page ES-4), an amount that the current facilities can easily infiltrate. In light of the unproven availability of additional "native" SAR water, the proposed projects appear to be unnecessary, and the water rights application is requesting more "native" SAR water (af/y) than is actually available. We are very concerned that this Application and DPEIS will only add to the steadily-growing list of "paper-water" entitlements throughout southern California and on the Santa Ana in particular. Although future planning is important and necessary, the DPEIS makes almost no concessions to the very real possibility that the OCWD's projections will not be met. Granting numerous overlapping appropriations and thus allowing for the removal of more water than exists is completely detrimental to the health of the SAR and the surrounding environment. CEQA demands that this significant impact be identified, analyzed, and mitigated, if possible. The DPEIS fails to do this.

B. The DPEIR Fails To Properly Identify the Full Range of Direct, Indirect, and Cumulative Impacts to Biological Resources and Mitigate Those Impacts.

1. Analysis of Impacts.

Many of the inadequacies of the DPEIR identified in these comments stem from the fact that the document improperly defers identification and analysis of the project's impacts for the "programmatic" projects, as well as formulation of mitigation measures, to later stages of project development. This deferral frustrates informed decision-making and violates CEQA. The DPEIS is based on a number of projects that are analyzed as posing a potentially significant impact to numerous environmental resources (DPEIS at Page 5-13 through 5-24). However, the evaluation of the resources and analyses of impacts are deferred to future CEQA documents. Just mentioning the potential broad impacts does not in any way satisfy CEQA's requirement to thoroughly analyze the environmental effects of the impacts in order to avoid or mitigate those

7-3

effects. This is an unfortunate consequence of the lack of information about specific populations of wildlife and plants.

2. Mitigation Measures

Most of the mitigation measures proposed in the DPEIR are already required by existing law and do not represent additional efforts to avoid or mitigate the environmental harm that will result from build-out of the project. These mitigation measures include requiring biological surveys to be conducted, obtaining the proper permits, determining jurisdictional surface waters, zones for open space, and protect active raptor nests. Further, a number of important mitigation measures are either deferred to a later time or are inadequate to offset the extreme damage that will occur from additional infrastructure development in both a State Park and within the boundaries of a Natural Communities Conservation Plan area.

Unfortunately, the DPEIR is full of examples of impacts that are identified in only the most cursory fashion, and left both unanalyzed and unmitigated. For example, Section 5.5 identifies impacts to 933 acres of critical habitats for the Least Bell's Vireo and southern Willow Flycatcher; however, analyses of the impacts to these federally listed species in the plan area are left to future EIRs, and thorough discussion of mitigation for lost habitat is limited to "See **RB-BIO-1** and **RB-BIO-2**." RB-BIO-1 states that "The District will consult with resource agencies including the USFWS, CDFG, the USACE, and the RWQCB to obtain necessary permits prior to implementation of projects that could result in disturbance to biological resources". RB-BIO-2 states:

The District shall implement a pre-construction mitigation strategy first to identify sensitive habitats, plants, and wildlife species, and then to avoid impacts if possible. If avoidance is not possible, the District shall minimize the impact and compensate in accordance with permitting requirements. This general mitigation strategy is summarized below.

- **Determine if sensitive habitats or species are present:** The District will retain qualified biologists to survey the project site for sensitive habitats, plants, and wildlife species.

- **Avoid loss of sensitive habitats and species:** The District will avoid disturbing sensitive biological resources, if possible. During project planning and siting, alternative locations or project configurations will be evaluated.

- **Minimize loss of sensitive habitats and species:** If avoidance is not possible, the District will limit construction activities in and around sensitive habitats and species to the minimum area necessary.

- **Compensate for unavoidable loss of sensitive habitats and species:** If avoidance is not possible, the District will compensate for the unavoidable losses in coordination with the USFWS and CDFG. Compensation for sensitive habitats and special-status plant communities could involve either purchasing property with similar habitat or plant communities and providing for their protection and management for wildlife value in perpetuity, or enhancing sensitive habitat and plant communities within existing conservation areas.

7-4

All of these mitigation measures are generalized, and do not analyze what the actual impacts will be and how, when and where the mitigations for specific impacts will be implemented.

7-4
(cont.)

Furthermore, Section 5.5 indicates that many of these resources have "potentially significant" impacts (DPEIR at 5-20 through 5-23), with no additional proposed mitigation measures. Given the high number of federally listed species on the project sites, the DPEIR is seriously and fundamentally flawed because it fails to adequately analyze the applicability of the Endangered Species Act ("ESA") to the proposed projects. Section 9 of the Endangered Species Act forbids the "take" of threatened and endangered species. 16 U.S.C. §1538, ESA §9; 50 C.F.R. § 17.31. Take is defined by the ESA as "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in such conduct," 16 U.S.C. § 1532(19), and harm "means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 CFR §17.3. The DPEIR will result in harm to a number of protected species, through modification and degradation of its habitat, and may result in harm to several other listed species. Unfortunately, the DPEIR fails to adequately identify or analyze these issues.

7-5

Further, because this document is programmatic, these projects may be built-out over the course of 15 to 20 years. CEQA requires that all the proposed projects be evaluated as a whole and be reviewed at the *earliest possible time* in order to avoid the kind of piecemeal implementation that fails to take into account the direct, indirect, and cumulative environmental impacts of each stage, phase, or part of a project. One of the fundamental objectives of CEQA is to facilitate the identification of "feasible alternatives or feasible mitigation measures which will avoid or substantially lessen" significant environmental effects. Pub. Res. Code § 21002. Under CEQA, "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. . . ." Public Resources Code § 21002. Consequently, an EIR must accurately identify impacts and feasible measures to mitigate significant environmental impacts identified in the EIR. 14 CCR §15126. The OCWD's duty to provide a detailed analysis of environmental impacts of the proposed projects and to impose enforceable mitigation measures cannot be deferred to a later stage of environmental analysis.

7-6

C. Conclusion

The above-described defects must be corrected before the OCWD can lawfully proceed through the water rights application process. The DPEIR for the Application to Appropriate Santa Ana River Water fails to adequately disclose, analyze, avoid, minimize, and mitigate the environmental impacts of the proposed projects. As detailed above, the DPEIR fails to comply with CEQA and fails to provide necessary information about the impacts of the project in many areas including biological resources, water availability, and other environmental resources.

7-7

Neither decision-makers nor the public can make informed decisions about the costs to the environment of the proposed projects based on this fundamentally flawed and cursory

environmental review. The Center looks forward to reviewing a revised EIR that takes into account the issues raised in this comment letter and in letters provided by others.

Sincerely,



Adam Keats
Staff Attorney
Center for Biological Diversity

CC:

Field Supervisor
USFWS- Ecological Services
Carlsbad Field Office
6010 Hidden Valley Road
Carlsbad, CA 92011

California Department of Fish and Game
Los Alamitos Administrative Office
4665 Lampson Avenue, Suite J
Los Alamitos, CA 90720



Dan Skopec
Acting Secretary

Comment Letter 8
State Water Resources Control Board

Division of Water Rights

1001 I Street, 14th Floor ♦ Sacramento, California 95814 ♦ 916.341.5300
P.O. Box 2000 ♦ Sacramento, California 95812-2000
Fax: 916.341.5400 ♦ www.waterrights.ca.gov



Arnold Schwarzenegger
Governor

May 30, 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

Dear Mr. Miller:

**COMMENTS ON RECIRCULATED DRAFT PROGRAM ENVIRONMENTAL IMPACT
REPORT FOR THE ORANGE COUNTY WATER DISTRICT APPLICATION TO
APPROPRIATE SANTA ANA RIVER WATER (SCH# 2002081024)**

On March 30, 2006, the Orange County Water District (OCWD) issued the Recirculated Draft Program Environmental Impact Report for the Orange County Water District Application to Appropriate Santa Ana River Water (DPEIR). OCWD allowed two additional weeks for the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) to submit its comments on the above-referenced project. The California Environmental Quality Act (CEQA) requires the State Water Board, as a responsible agency with jurisdiction over the water rights and beneficial uses of water of the Santa Ana River (SAR), to consider the environmental effects of the project analyzed in the DPEIR. An EIR must provide a responsible agency with sufficient information describing the project and its potential environmental effects for the responsible agencies to make a meaningful response. In its capacity as a responsible agency under CEQA, however, the State Water Board will make independent findings and may require additional or different mitigation measures for impacts identified in the resource areas within the State Water Board's jurisdiction, specifically for the water right application component of the project. (Cal. Code Regs., tit. 14, § 15096).

As discussed below, State Water Board staff has concerns with various portions of the DPEIR, including the project versus program-levels of CEQA review, the project description, the water availability analysis, the potential for groundwater contamination, beneficial uses and biological resources of the Santa Ana River watershed, Prado Dam conservation, and cumulative impact analysis, as well as the environmental documentation for the La Jolla Recharge Basin and the water rights for the Santiago Creek Expansion Recharge Project.

Project Versus Program-Level of Review

The DPEIR contains two components. The first component is a project-level environmental analysis of SAR diversions (existing, near-term, and long-term); the Anaheim Lake expansion project and the Santiago Creek expansion project. The

8-1

second component is a program-level environmental analysis of future projects identified in the DPEIR and OCWD's water right Application 31174.

Project-level CEQA review is required before the State Water Board can issue the water right permit requested under Application 31174. Any project listed in this DPEIR, therefore, that relies on a water appropriation granted to OCWD under A031174 needs to be analyzed at a project level. A programmatic level EIR is insufficient for Division staff to determine the environmental impacts of granting a water right. Application 31174 proposes multiple projects, which are under various stages of development and CEQA compliance. In order for Division staff to evaluate the DPEIR with respect to Application 31174, OCWD needs to clarify how much water it proposes to divert at each project listed in its application, how those projects relate to the projects listed in the DPEIR, and how OCWD has complied with CEQA for each of those projects. OCWD also needs to clarify which projects it has determined are not subject to CEQA and why.

On page 8-11 of the DPEIR, OCWD states that it hasn't decided if it will pursue development of the two reservoir storage projects (the Gypsum and Aliso Canyon reservoir sites) for which detailed siting evaluations and conceptual designs have not yet been prepared, but that it wants to retain those options for additional future storage capacity. Further, at this time, with this programmatic level CEQA review, OCWD states in the DPEIR that the "No Storage Reservoirs Alternative" is the environmentally superior alternative. Under this alternative, only 445,000 acre-feet per year (afy) of SAR water could be diverted and recharged into the Orange County groundwater basin, and additional analysis would be required to assess OCWD's actual recharge capacity without the use of off-river storm water storage reservoirs. (DEIR at p. 8-8) The EIR should specify how much water OCWD can actually capture in its CEQA compliant facilities.

8-1

(cont.)

As we stated in our July 30, 2004 letter, if the problems with CEQA gaps in certain projects are not remedied, the State Water Board will have to limit the scope of its approval to only those components (and the corresponding amount of water) that are properly addressed under CEQA.

Project Description

Water right Application 31174 lists eight points of diversion (POD). Table 2-5 (DPEIR at p. 2-18) lists six points of diversion and a general description of diversion locations. However, no indication is given in the list of near and long term projects (Table 3-1, DPEIR at p. 3-2), nor does the DPEIR identify which POD will be a diversion point for each project. The EIR should give a complete project description in order to determine the environmental impacts of the proposed water diversions.

8-2

There are inconsistencies between the information in OCWD's water right Application 31174 and the DPEIR. Attachment 4a to Application 31174, "Supplement to Orange County Water District's Application to Appropriate Water By Permit", submitted in November 1992, lists direct diversion and storage amounts that do not match the projects and diversion and storage amounts shown in the DPEIR for all cases, although the total volume requested in the application is the same as shown in the DPEIR (e.g. Tables ES-1 and Table C-1). In addition, Figure 2-9 is inconsistent with the engineering map the State Water Board has on file for Application 31174. The diversion points are not in the same location in every case and have been renumbered. In addition, not every diversion point listed in the Application 31174 is shown in the CEQA document. OCWD lists two diversion points upstream of Figure 2-9 and this DPEIR only lists one diversion point and the application lists the eighth diversion point as "Diversion through the Santa Ana River Bottom." The CEQA document must be consistent with OCWD's application or the application will need to be modified. While the map submitted with OCWD's application showed the pipeline leading from the Burris Pit to the Santiago Creek recharge facility, OCWD should clarify that the pump station at the Burris Pit is a point of rediversion in their application.

8-2
(cont.)

Water Availability:

In accordance with Water Code section 1375(d), in order for the State Water Board to issue a permit to appropriate water, there must be unappropriated water available to supply the applicant. OCWD provided information on historical Santa Ana River (SAR) flow as well as estimates of potential future flow at Prado Dam. Historical flow data in Figure 4.2-1 shows the total amount OCWD requests to appropriate under Application 31174 has flowed below Prado Dam on two occasions over the seventy-year period from Water Year (WY) 1934-35 to 2004-05. This includes one occasion in WY 1992-93 (Appendix D, page D-3). OCWD concludes in its assessment of future SAR flows below Prado Dam with year 2052 flow projections that, after accounting for other planned upstream diversions, 505,000 afy is reasonably foreseeable during a future wet year at OCWD's main river system diversion points. OCWD also provided historical information and projected future average annual flows reaching Prado Dam (appendix D, page D-7). Under current conditions, OCWD captures up to about 250,000 afy in its existing facilities.¹ OCWD's analysis shows that the quantity of water it seeks to appropriate from the Santa Ana River under Application 31174 is considerably more than the amount of water normally available. Therefore, any permit issued by the State Water

8-3

¹ OCWD states on page 3-1 (and elsewhere) that it currently diverts up to 250,000 afy. However, on page 8-6, OCWD states that it currently diverts 264,000 afy. Both of these amounts are shown as recharge capacity. We assume the discrepancy is the 14,000 afy attributed to Santiago Creek Replenishment and River View Recharge Basin projects. Footnote 4 in Tables ES-1 and 3-1 includes 14,000 afy attributed to Santiago Creek Replenishment and River View Recharge Basin projects that have been implemented since the application was submitted under the "Near-Term Projects."

Board, would have to acknowledge that the amount of water specified in OCWD's application is not expected to be available in most years. OCWD concedes that, due to annual variability of flows in the SAR, 505,000 acre-feet will not be available every year.

Staff will use this water availability information in processing OCWD's water right application and may ask for additional information under its water right authority. It is unclear what portion of the flow requested by OCWD can be appropriated until the Board determines the quantity of water that may be necessary to maintain beneficial uses and also determines which elements of OCWD's overall project is covered by adequate CEQA documentation.

8-3
(cont.)

Groundwater contamination

Contaminant plumes affect much of the groundwater basin in the Santa Ana River watershed. However, DPEIR section 4.2, Santa Ana River Hydrology and Water Resources (DPEIR at 4.2-1) does not discuss groundwater contamination. The DPEIR should identify any plumes in the vicinity of the project and address whether increased recharge will move or exacerbate any such plumes.

8-4

Beneficial Uses

In compliance with Water Code section 1243, "in determining the amount of water available for appropriation, the State Water Board shall take into account, whenever it is in the public interest, the amounts of water needed to remain in the source for the protection of beneficial uses."

The Santa Ana Regional Water Quality Control Board (SARWQCB) has designated the Reaches 1 and 2 of the Santa Ana River below Prado Dam as having the beneficial use designations of REC 1, REC 2, WARM, intermittent WILD (Reach 1) WILD (Reach 2), RARE, AGR, and GWR. The DPEIR states that existing conditions in Reach 1 would not be affected by the continued diversion of virtually all the base flow. In addition, the proposed project would not change the current conditions in the river with respect to beneficial uses and would help achieve the GWR beneficial use (DPEIR at p. 4-21-22).

The existing conditions in Reach 1 and Reach 2 are partially the result of OCWD's undocumented historical diversion practices. In acting upon OCWD's application, the State Water Board must consider the impacts of proposed appropriations on the beneficial uses designated by the SARWQCB. As OCWD is aware, the Department of Fish and Game filed a protest against OCWD's water right application, which requested a specific proposal to provide minimum bypass flows for maintenance of aquatic habitat, fish, and wildlife resources as a protest dismissal term.

8-5

Biological Resources

By letter dated January 30, 2003, to OCWD, San Bernardino Valley Water Conservation District, San Bernardino Valley Municipal Water District, Chino Basin Watermaster and the City of Riverside (SAR applicants), Division staff provided references to websites for the USFWS, CDFG, and the CA Native Plant Society that lists biological survey guidelines to be followed in the preparation of CEQA documentation and requested that the SAR applicants follow these guidelines. However, OCWD used reconnaissance-level survey methodology to prepare the biological resources section, Section 4.3, of the DPEIR (DPEIR at p. 4.3-3). In the interests of clarity, OCWD should demonstrate how the surveys completed for this DPEIR are sufficient using the above listed criteria or should resurvey the Project using the protocols of USFWS, CDFG and the CA Native Plant Society.

8-6

Prado Dam Conservation

The Prado Basin Activities are discussed on pages 2-24 to 2-26 of the DPEIR. A draft EIR/EIS, published in June 2004, considers raising the conservation pool as high as 508 feet above sea level (asl) during both summer and winter seasons, although the recommended plan is to raise the pool to 498 asl during winter and maintain the pool at its current level of 505 during the summer (DPEIR at p. 2-25). Table ES-1, OCWD states that an EIR for elevation 505 feet will be published in 2006 (DPEIR at p. ES-3). Since the CEQA documentation for current operations at Prado Dam has not been finalized, the State Water Board cannot determine the adequacy of the document with respect to possible issuance of a water right for that amount of water.

8-7

The DPEIR presents a programmatic-level of review for raising Prado Dam to 514 feet elevation. As previously indicated, if OCWD seeks State Water Board approval for water stored at Prado Dam at an elevation of 514 feet, it must complete a project-level impact analysis.

Cumulative Impacts

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects (Cal. Code Regs., tit. 14, § 15355). For a CEQA analysis sufficient for the State Water Board to determine the impacts of granting water right Application 31174, OCWD must consider the cumulative impacts of the entire project that includes impacts of near- and long-term

8-8

projects and the existing operations for which OCWD seeks approval. It is unclear what the cumulative impacts of OCWD's project will be on the SAR between Prado Dam and the concrete channel. OCWD also states that some impacts depend on the ACOE's operation of Prado Dam for flood control operations (DPEIR, p. 7-10.). OCWD needs to consider the new impacts from the ACOE operating Prado Dam for conservation purposes, in addition to flood control, for both the SAR and the conservation pool. The operation impacts discussion on page 7-15 should be expanded.

8-8
(cont.)

La Jolla Recharge Basin Project

The La Jolla Basin Recharge Project is a near-term project listed in Table 3-1 (DPEIR at p. 3-2). On March 6, 2006, State Water Board staff submitted comments on the La Jolla Recharge Basin Draft Environmental Impact Report (State Clearinghouse Number: 2003041190) (DEIR). In those comments, staff noted that the DEIR must include at a minimum, a WAA demonstrating that unappropriated water is available for the proposed project, and a discussion and analysis of potential impacts in accordance with applicable topics described in State Water Board Outline for Environmental Impact Reports Involving Water Development Projects. On April 28, 2006, in the Response to Comments section of the Final EIR, OCWD stated that the availability of unappropriated Santa Ana River water, and the CEQA documentation issues, have been demonstrated in accordance with the processing requirements for the pending water right Application 31174. As discussed above, however, the DPEIR for OCWD's pending water right application should be revised to include additional information regarding the environmental effects of OCWD's proposed water diversion and storage projects.

8-9

Santiago Creek Expansion Recharge Project

The Santiago Creek Expanded Recharge Project will add an additional 3,000 afy of recharge capacity. OCWD proposes to divert water from the SAR to this facility and has not applied to divert water from Santiago Creek under Application 31174. OCWD needs to describe its existing water right, if any, for the existing Santiago Creek Recharge Basins and whether any additional water will be diverted from Santiago Creek as a result of this expansion project. If so, OCWD needs to describe how the additional diversions will comply with the terms of its existing water right.

8-10

Prior Rights

On page 1-2, OCWD claims to have acquired pre-1914 water rights on the SAR, below the present Prado Dam from two irrigation districts. OCWD does not quantify the amount of water claimed under these rights. It is our understanding, that the amount of water claimed under pre-1914 rights is included in OCWD's request to appropriate

8-11

Mr. Craig Miller

7

May 30, 2006

water under Application 31174. Therefore, Application 31174 would not be additive to any existing pre-1914 water rights OCWD may currently possess.

8-11
(cont.)

General Clarification

The DPEIR refers to existing CEQA documents in various appendices. However, in some cases, the document contained in the specified appendix is not the correct document or is incomplete. For instance, the "Anaheim Lake Expanded Recharge Project Initial Study" and "Santiago Creek Expanded Recharge Project Initial Study" in Appendix I-1 are draft documents. Appendix C refers to various documents in Appendix L, instead of directing the reader to Appendix M. As another example, Appendix M-6 is purported to contain a 1992 Prado Dam Operation for Water Conservation Final Report and EIS. Appendix M-6 contains only the executive summary and biological opinion. This is also the case for Appendix M-11, 2004 Prado Basin Water Conservation Feasibility Study, Main Report and Draft EIS/EIR.

8-12

This letter will be faxed you by 5 p.m. on May 30, 2006, and a copy will be sent by U.S. mail. If you have any questions, I can be reached at (916) 341-5349 or jfarwell@waterboards.ca.gov.

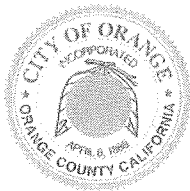
Sincerely,

ORIGINAL SIGNED BY: Lewis Moeller for

Jane Farwell
Environmental Scientist

bcc: Jean McCue, Dan Frink, Les Grober, Gita Kapahi, Lewis Moeller

JF:llv 5/30/06
U:\Herdrv\JFarwell\File A031174530DPEIR.doc



Comment Letter 9

CITY OF ORANGE

DEPARTMENT OF COMMUNITY DEVELOPMENT

www.cityoforange.org

ADMINISTRATION
(714) 744-7240
fax: (714) 744-7222

PLANNING DIVISION
(714) 744-7220
fax: (714) 744-7222

BUILDING DIVISION
(714) 744-7200
fax: (714) 744-7245

CODE ENFORCEMENT DIVISION
(714) 744-7244
fax: (714) 744-7245

May 30, 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

#21-06

Subject: Recirculated Draft Program Environmental Impact Report (DPEIR) for the Orange County Water District (OCWD) Application to Appropriate Santa Ana River Water

Dear Mr. Miller,

Thank you for the Notice of Availability for the DPEIR and the opportunity to review the DPEIR for the Orange County Water District Application to Appropriate Santa Ana River Water. The proposed project would utilize existing diversion and recharge facilities as well as propose near-term and long-term facilities for additional storage and recharge. The OCWD is proposing to install a 36-inch diameter pipeline or a culvert for an approximate length of 1,500 feet through the Hart Park parking lot (Santiago Creek) located in the City of Orange (City) to increase discharges by 15 cfs from the Santiago Basin to Santiago Creek. Construction of these facilities on City-owned property will require City approvals in the form of permits and agreements. Therefore, the City is a responsible agency under the California Environmental Quality Act (CEQA) and may use this environmental document for CEQA compliance for any City discretionary approvals.

As a responsible agency under CEQA, the City of Orange (City) would appreciate consideration of the following comments regarding the DPEIR:

1. In the interest of moving the project forward, the City has submitted several comments below. However, due to the programmatic level of the DPEIR and the generalized discussion of the environmental impacts, the City anticipates reviewing a construction level document provided by the OCWD regarding all portions of the project located in the City prior to implementation.

9-1

2. Any project within the jurisdiction of the City will be required to provide detailed design and construction level plans for City review and approval prior to the issuance of any encroachment permits or project implementation. 9-2
3. The DPEIR does not adequately address potential impacts from flooding within the Hydrology and Water Resources section. The City is concerned about any increase in surface water elevations resulting from the increase in base flow within Santiago Creek and the potential to flood adjacent development including any impacts to Hart Park. There are small areas (residential areas) adjacent to Santiago Creek that are in the flood plain and any increase may impact these areas or others currently outside the flood plain. For that reason the City requests that a hydraulic analysis be performed as part of the DPEIR. The City also requests that the OCWD conduct a hydraulic analysis for the entire project to assess hydraulic impacts to the channel and potential flood levels of Hart Park. If the hydraulic analysis finds there are significant flooding issues and impacts to parking or residential areas, the City requests that the OCWD mitigate the impacts and address any potential loss of parking as stated below in comment number 16. 9-3
4. The City requests that a mitigation measure for Water Quality impacts from the proposed project be added requiring the OCWD to work/partner with the City by sharing costs for the City's National Pollutant Discharge Elimination System (NPDES) sub-regional treatment facilities. The OCWD should contact Assistant City Engineer, Roger Hohnbaum, at (714) 744-5544 to coordinate these efforts. 9-4
5. The DEIR does not include any detailed description/exhibit showing how the proposed culvert will be built along the Hart Park parking lot and the entry/outlet from the parking lot. It is unclear how the additional 15 cfs increase will be diverted into/from the culvert nor is there information on how the channel bottom (depth of flow) of the creek will be affected by the increase. To avoid backup of creek water, please clarify if the water may need to be pumped up and returned as surface flow unless the water is infiltrated directly into the creek. In that case permeable material capable of infiltrating an additional 15 cfs needs to be provided at the outlet point of the parking lot. The City requests that detailed descriptions/exhibits of this condition be provided and discussed in the DPEIR along with the impacts to the channel bottom. 9-5
6. The City requests that the OCWD install an open culvert with an earthen bottom rather than a 36-inch diameter pipeline for the proposed project. The City requests that a mitigation measure be provided requiring coordination with the City to provide access over the trench and provide safety measures to protect park users to the City's satisfaction. 9-6
7. Santiago Creek is fairly dry during most of the year except during storm flows, which restricts the taking of water samples from the creek. The expanded surface water may be determined to exceed water quality criteria after implementation of the project due to the fact that portions of the Hart Park parking lot would experience an increase in surface flow that would capture pollutants which would normally only be captured during storm flows, since the parking lot is typically dry. Also, the addition of surface water has the potential to affect beneficial uses such as recreational by providing an enticing environment for water recreation. In the event that the County of Orange or another entity takes creek samples after the proposed project is implemented and the surface water is determined to exceed water quality criteria, the City requests that mitigation be added to the Water Quality section. 9-7

of the DPEIR that OCWD also assume responsibility for the treatment/cleaning of that water since the OCWD is responsible for the surface flow.

9-7
(cont.)

8. Within the DPEIR the definition of "base flow" is not clear. The top of page 4.2-6 implies that base flow is treated wastewater. However, base flow may be comprised of treated wastewater, groundwater infiltration, nuisance runoff and other types of discharges making their way into channels and rivers. The City requests the DPEIR expand on the definition of "base flow" and provide an explanation of what types of water are being referred to as "base flow".

9-8

9. The field survey discussed in the Biological Resources section of the DPEIR does not consider the recent sightings of least Bell's vireo (*Vireo bellii pusillus*) (LBV) within the project vicinity. LBV is listed as endangered under the California and Federal Endangered Species Act and has recently been detected along the banks of Santiago Creek at Cambridge Street near the Hart Park parking lot. The occurrence of the LBV in this location demonstrates that riparian vegetation within Santiago Creek can provide acceptable habitats for the species. The DPEIR does not evaluate impacts to LBV and riparian habitats. The construction impacts may adversely affect the LBV and its habitat by removing riparian habitats due to construction. The City requests the Biological Resources section of the DPEIR address impacts to the least Bell's vireo within the vicinity of Santiago Creek and the potential impacts from construction. As a mitigation measure, the City requests prior to construction, a qualified biologist conduct a preconstruction bird survey to establish the presence of any nesting/active LBVs within the project area and incorporate nest avoidance measures. In addition, the DPEIR must describe direct impacts to riparian habitat and incorporate habitat replacement measures to compensate for the removal.

9-9

The City encourages the continual removal of non-native plant material such as arundo and other invasive species along Santiago Creek and continued coordination with the City on future restoration projects. The City encourages further restoration within the Santiago Creek vicinity as mitigation measures if the field survey or DPEIR identify additional impacts to biological resources.

9-10

10. Under the Land Use and Recreation section of the DPEIR the Santiago Creek Expanded Recharge project could temporarily reduce the availability of recreational resources such as parking, trails, roads, etc. In order to avoid significant disruption of park and trail amenities, the City requests a mitigation measure added to the DPEIR requiring that prior to and during construction, OCWD display visible signage at locations approved by the City notifying residents of the temporary closure of recreational resources. The signage provided and maintained by OCWD would display temporary removals of bike trail access and lead trail users to alternate connections. OCWD should coordinate with the City in determining the temporary location for bike paths during construction.

9-11

11. The City requests that OCWD provide visual screening such as lining for the construction fences during all construction activities as a mitigation measure in the Aesthetics portion of the DPEIR. Hart Park is the City's largest Community Park where hundreds of residents utilize the Park's amenities, landscaping and aesthetics on a daily basis. Providing visual screening would preserve the appeal of Hart Park and minimize aesthetic impacts during construction.

9-12

12. The City requests the OCWD implement and monitor Air Quality Management District (AQMD) Best Management Practices (BMPs) in accordance with existing regulations. Prior to and during construction the OCWD shall be in compliance with AQMD Rule 402 and 403 such that air pollutant emissions do not create a nuisance off-site and the presence of dust does not remain visible in the atmosphere. These practices may include chemical stabilizers, wind fencing, covering haul vehicles, bed liners in haul vehicles, high wind measures, reduced speed limits, limitation on yardage hauled per day, limitations on hauling route (e.g. trucks per hour), limitations on truck idling, etc. Many of our residents utilize Hart Park for leisurely activities such as running, jogging, playing sports, eating lunch, etc. Implementing/monitoring BMP measures would minimize air quality impacts and prevent deterrence of residents from utilizing Hart Park's amenities. There are several residential homes adjacent to Hart Park. The potential dust migration may have impacts on the health of the residents adjacent to Hart Park. The City requests, all AQMD BMP's are implemented in accordance with existing regulations in order to reduce Air Quality impacts to less than significant.

9-13

13. The City requests that mitigation be included in the Noise Section of the DPEIR requiring the OCWD to notify all residents within the project vicinity of the constructions hours, anticipated construction timeline, and all other applicable project details/impacts/information, prior to construction.

9-14

14. The City supports the involvement of a qualified professional in the construction process, as stated in mitigation measure M-CULT-2 requiring a qualified architectural historian to conduct a survey of the Hart Park construction area prior to excavation. The City of Orange places a high priority on the protection of historical resources and the City would like to further support the OCWD in implementing mitigation measures to minimize all impacts to cultural resources.

However, the City requests that the DPEIR provide an analysis of the impacts of the proposed construction on the Santiago Creek Channel and more specific criteria to be established in the mitigation measure stated in the DPEIR. As stated in the DPEIR, the Hart Park parking lot, including the creek bottom and walls is identified to be a contributing component of the Old Towne Orange Historic District, which is listed on the National Register and California Register of Historical Resources. The City feels that without analyzing proposed changes to a documented historical resource, the DPEIR does not provide an adequate evaluation of impacts.

9-15

The City recommends the mitigation measure in the Cultural Resources portion of the DPEIR require a qualified preservation architect to review and ensure that detailed project plans comply with the Secretary of Interior Standards and work methods/techniques consistent with National Park Service Preservation Briefs. A qualified architect should supervise construction activities. During construction, protective fencing should be placed around sensitive historical areas such as the walls of Santiago Creek and monitored by a qualified architect.

15. In the event that any portion of Santiago Creek (walls, bottom of creek, etc.) is inadvertently damaged, the City requests a mitigation measure be included in the Cultural Resources section of the DPEIR stating that the OCWD will assume responsibility for replacing/restoring the damaged area to its original condition in compliance with the

9-16

Secretary of Interior's Standards for Treatment of Historical Resources. Methods recommended in applicable Preservation Briefs under the supervision of a qualified preservation architect should be used. Since this cultural resource holds great value to the City of Orange and its residents, the City would like to be included in an advisory capacity in any repair or reconstruction work related to project-related damage to Hart Park.

9-16
(cont.)

16. The proposed project is located in the parking lot of Hart Park and will substantially impact existing parking by reducing the number of parking spaces during construction, as well as after implementation of the proposed project. The DPEIR did not include a parking study analyzing the parking impacts the proposed project will potentially have on Hart Park and how the loss of spaces at Hart Park may have an impact to adjacent residential streets. The City requests that OCWD prepare a parking study of Hart Park to quantify the loss of parking spaces and address the findings in the DPEIR. The City believes that given the regular heavy use of the parks and limited amount of parking, any reduction in parking should be considered a significant impact. If the parking study finds significant impacts to the existing parking, the City requests the OCWD coordinate with the City to identify appropriate and feasible mitigation such as relocation of parking or providing the City funds for alternate parking.

9-17

17. The City agrees with mitigation measure M-TR-1 stating that prior to construction, the OCWD shall obtain an encroachment permit from the City of Orange and include a traffic control plan that will provide for temporary parking during construction. Hart Park is the City's largest community park where hundreds of residents utilize its amenities on a daily basis. The City supports including a traffic control plan to minimize traffic impacts. The City requests signage be placed in visible locations by the OCWD in order to inform/direct park visitors off/to the temporary parking. To adequately demonstrate that temporary parking impacts can be mitigated, the DPEIR must include a description of the anticipated number of spaces to be removed and identify feasible locations for temporary/replacement parking from the parking study requested above.

9-18

18. The City requests that the OCWD coordinate with the City on the start date of construction in order to reduce the inconveniences and impacts toward scheduled recreational activities at Hart Park. Due to the built-out condition of the surrounding residential area, the City is concerned about where and how temporary parking would be provided. The City also requests that construction not occur during the summer months due to the high volume of citizens using the pool, ball fields, playground, picnic facilities, and attending the summer concert series at the park.

9-19

19. The Traffic section of the DPEIR states the installation of the by-pass pipeline through the Hart Park parking area will affect traffic and parking for 6 months, however the DPEIR does not provide any information for access ways during construction. There are no mitigation measures providing access roads during construction in order to keep the park open and available for residents. Due to the unavailability of feasible access roads during construction for residents to Hart Park and limited parking availability many of the activities that typically occur at Hart Park would likely be diverted to Grijalva Park. Parking at Grijalva Park is limited and the environment around the park is not conducive to pedestrian and bicycle access to Grijalva Park. Therefore, the City requests the OCWD construct a permanent access way along Santiago Creek by continuing an existing maintenance road from east of Tustin Street to Chapman Avenue on the south-east side of the Santiago

9-20

Creek and continuing the existing maintenance road southerly from mid way between Palm Avenue and Walnut Avenue to north of Chapman Avenue on the west side of the creek for maintenance trucks, pedestrians, and bikers (See Attachment A). This access road would provide some entrance into Grijalva Park, as well as provide alternative access to Hart Park when parking availability or direct access is limited for residents/City vehicles that would normally have to drive/park to/at Hart Park.

9-20
(cont.)

20. The City Noise Ordinance as stated in the Orange Municipal Code Chapter 8.24.070 (e) allows construction work only during certain hours of the day as noted in the DPEIR. The City requests that a mitigation measure be added to the DPEIR indicating that no work shall occur outside of these hours to ensure noise levels are not increased beyond the designated time periods. If construction were to occur outside of designated work hours, this would constitute a significant short-term impact to the City of Orange residents.

9-21

Thank you for the opportunity to review the DPEIR. The City looks forward to reviewing the response to the above comments, final EIR, future detailed construction level plans, and environmental documents as the proposed project moves closer to implementation.

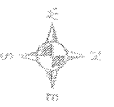
Sincerely,



Alice Angus
Community Development Director
City of Orange

cc: Roger Hohnbaum, Assistant City Engineer
Genie Estrada, Water Quality
Anna Pehoushek, Principal Planner
Jennifer McDonald Le, Senior Planner/Environmental Review Coordinator
Sharon Baik, Environmental Planner
Bonnie Hagan, Interim Community Services Director
Pamela Galera, Community Services Project Coordinator

Attachment: Proposed Access Road



Legend

 Parks

 Proposed Trail

**Proposed Access Road
Attachment A**

30th, May 2006

Comment Letter 10



May 31, 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

Re: Orange County Water District Application to Appropriate Santa Ana River Water
Recirculated Draft Program Environmental Impact Report (March 2006)

Dear Mr. Miller:

Science Applications International Corporation (SAIC) serves as a consultant to San Bernardino Valley Municipal Water District and Western Municipal Water District of Riverside County (Muni/Western) in connection with Muni/Western's water right applications to divert water from the Santa Ana River and is pleased to submit these comments on behalf of Muni/Western. Muni/Western appreciate the opportunity to review the above-referenced Draft Program Environmental Impact Report (Draft PEIR). Muni/Western support the efforts of Orange County Water District (OCWD) to maximize the beneficial use of the region's water resources in ways consistent with the 1969 *Orange County* Judgment. Muni/Western offer the following comments:

1. In 1969, Muni/Western, OCWD, and other parties entered into a stipulated judgment in *Orange County Water District v. City of Chino* (Orange County Superior Court No. 117628). Under that judgment, parties upstream of Prado Reservoir have a right to:

divert, pump, extract, conserve, store and use all surface and groundwater supplies originating within Upper Area without interference or restraint by Lower Area claimants, so long as Lower Area receives the water to which it is entitled under this Judgment and there is compliance with all of its provisions.

The *Orange County* Judgment further provides that Muni/Western "and other entities upstream of Prado Dam shall have *full freedom to engage in any activities for conservation or storage above Prado Reservoir*, provided that the Base Flow obligations in Paragraph(s) 5(b) and (c) of the Judgment herein are fulfilled." (Emphasis added.) By means of the Memorandum of Understanding to Affirm and Preserve Existing Rights in the Santa Ana River Watershed dated November 16, 1999, OCWD agreed that Application No. 31174 would not change or affect the terms of the *Orange County* Judgment and that Application No. 31174 would not serve as the basis for OCWD "to obtain any right as against any Upper Area water user or entity inconsistent with the terms of the [*Orange County*] Judgment."

10-1

- Muni/Western appreciate and commend OCWD for acknowledging that any rights that may be acquired pursuant to Application No. 31174 will be subject to and consistent with the terms of the *Orange County* Judgment. Muni/Western conclude that OCWD intends that the descriptions of OCWD's water rights, OCWD's operations, and other matters contained in the Draft PEIR to be construed in a manner that is fully consistent with the terms of the *Orange County* Judgment and the 1999 Memorandum of Understanding. It would be helpful for the Final PEIR to recognize and acknowledge that all operations of OCWD pursuant to Application No. 31174 will be consistent with both the *Orange County* Judgment and the 1999 Memorandum of Understanding. 10-1 (cont.)
2. The use of different diversion capacities in different portions of the Draft PEIR has created inconsistencies between text and figures in the cumulative analyses in Chapter 7 and Appendix D. Figure 7-2 shows, based on a repeat of Water Year (WY) 1992/1993 conditions that OCWD would divert 313 TAF, resulting in a flow to the ocean of 247 TAF. Figure 4 of Appendix D, which is a simulated repetition of WY 1992/1993 shows a "With Project" diversion of 341 TAF by OCWD, resulting in 219 TAF flowing to the ocean. The reader expects these data to match in the two figures. The issue is further confused, as it is unclear why OCWD's actual WY 1992/1993 diversions were not used. OCWD's actual diversion rates in WY 1992/1993 are stated as 237 TAF on page ES-2 and as 260 TAF in Figure 4 Appendix D. 10-2
3. The water availability assessment contained in Appendix D is consistent with Muni/Western's analysis. Appendix D considers the entire Muni/Western proposed applications for 200,000 af, and the full San Bernardino Water Conservation District Application in Table 4 and the accompanying text. However, text on Page D-14, describing Figure 6 states, "As shown in Figure 6, assuming 100 percent of planned diversions along the SAR are implemented, at least 262,000 afy would continue to flow to the ocean." That statement should be clarified to explain that Figure 6 does not show 100 percent of Muni/Western's planned diversions of 200,000 af (as accurately identified in Table 4 of Appendix D), but rather shows Muni/Western having diverted the maximum amount of water available assuming a simulated repetition of water year 1992-93 with increased urbanization. 10-3
4. The Chino Basin Watermaster Rights are characterized in two different ways in Appendix D. Within Figure 4, the No Project condition for Chino diversions is 0 TAF. Within Figure 6 the No Project condition for Chino is diversions of 27 TAF. Why are these descriptions of No Project conditions different? 10-4
5. Appendix J contains the cumulative impact assessment tables developed jointly by Muni/Western and OCWD. It appears the tables used by OCWD are an old version. Muni/Western request the following changes be included in the Final PEIR: 10-5
- Under Air Quality row, Upstream of Seven Oaks Dam to RIX-Rialto Effluent Outfall column, add the following text, "(SAR DEIR, 6-56)"

Mr. Craig Miller
May 31, 2006
Page 3

- Under Air Quality row, RIX-Rialto Outfall to Prado Flood Control Reservoir column, add the following text, "(SAR DEIR, 6-58)"
- Under Geology, Soils, and Minerals row, RIX-Rialto Outfall to Prado Flood Control Reservoir column, text should read, "(NI) (SAR DEIR, 6-20)"
- Under Groundwater Hydrology and Water Quality row, RIX-Rialto Outfall to Prado Flood Control Reservoir column, text should read "(NI) (SAR DEIR, 6-29)"
- Under Hazardous Materials row, RIX-Rialto Outfall to Prado Flood Control Reservoir column, text should read, "(NI) (SAR DEIR 6-53)"
- Under Recreation row, Upstream of Seven Oaks Dam to RIX-Rialto Effluent Outfall column, text should read, "Increase in number of zero flow days in river reach with generally little to no flow. (LTS) (SAR DEIR, 6-42)"

10-5
(cont.)

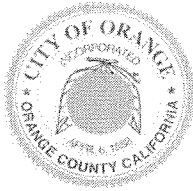
Thank you for the opportunity to comment on the Draft PEIR. Please call if you have any questions.

Very truly yours,
Science Applications International Corporation



Meredith Clement
Project Manager

cc: Robert L. Reiter
John V. Rossi
David Aladjem



Comment Letter 11

CITY OF ORANGE

DEPARTMENT OF COMMUNITY DEVELOPMENT

www.cityoforange.org

ADMINISTRATION
(714) 744-7240
fax: (714) 744-7222

PLANNING DIVISION
(714) 744-7220
fax: (714) 744-7222

BUILDING DIVISION
(714) 744-7200
fax: (714) 744-7245

CODE ENFORCEMENT DIVISION
(714) 744-7244
fax: (714) 744-7245

June 7, 2006

Mr. Craig Miller
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

#21-06

Subject: Re-submission of Comments for the Recirculated Draft Program Environmental Impact Report (DPEIR) for the Orange County Water District (OCWD) Application to Appropriate Santa Ana River Water

Dear Mr. Miller,

After clarification of design details from the OCWD and discussion of the City's comment letter dated May 30, 2006 for the Recirculated Draft Program Environmental Impact Report during a meeting held on June 7, 2006, the City would like to re-submit comments with revisions to comment numbers 3, 4, 5, and 14. Stated below are the revised comments only.

Since construction of the proposed project will require City approvals in the form of permits and agreements, the City is a responsible agency under the California Environmental Quality Act (CEQA) and may use this environmental document for CEQA compliance for any City discretionary approvals.

Once again, the City of Orange (City) appreciates consideration of the following comments regarding the DPEIR:

3. Upon completion of design plans, a hydraulic study will be needed for any proposed changes to the creek, i.e. grading, berms, dams, pipes, channels and plant growth due to constant flow of water. A hydraulic study must be provided and demonstrate that existing water surface elevations in Santiago Creek are not exceeded.
4. The City of Orange, as are other jurisdictions within the basin, is looking for methods of treatment for storm water runoff from city owned drainage systems. In the City of Orange, all drainage either flows into the Santa Ana River or into Santiago Creek. The City is

11-1

11-2

currently preparing a study to treat runoff in accordance with our permit. It may be possible to combine the efforts of the OCWD for percolation and the City's efforts for treatment in a cooperative fashion. The City of Orange requests that OCWD meet with the City to discuss the possibility of such cooperation.

5. Previous comment number 5 requested additional detailed descriptions/exhibits information regarding construction of the proposed culvert. After further discussion with the OCWD, the City concludes that detailed description/exhibits of the above explained conditions do not need to be discussed in the Program EIR. The City anticipates the reviewing and approval of detailed construction plans including culvert design information prior to the issuance of any permits.

11-3

14. The City supports the involvement of a qualified professional in the construction process, as stated in mitigation measure M-CULT-2 requiring a qualified architectural historian to conduct a survey of the Hart Park construction area prior to excavation. The City of Orange places a high priority on the protection of historical resources and the City would like to further support the OCWD in implementing mitigation measures to minimize all impacts to cultural resources.

However, the City requests more specific criteria to be established in the mitigation measure stated in the DPEIR. As stated in the DPEIR, the Hart Park parking lot, including the creek bottom and walls is identified to be a contributing component of the Old Towne Orange Historic District, which is listed on the National Register and California Register of Historical Resources. Depending on the project design, the project could effect this resource.

11-4

The City recommends the mitigation measure in the Cultural Resources portion of the DPEIR require a qualified preservation architect to review and ensure that detailed project plans comply with the Secretary of Interior Standards and work methods/techniques consistent with National Park Service Preservation Briefs. A qualified architect should supervise construction activities. During construction, protective fencing should be placed around sensitive historical areas such as the walls of Santiago Creek and monitored by a qualified architect.

Thank you for the opportunity to review the DPEIR. The City looks forward to reviewing the response to the above comments and comments submitted May 30, 2006, final EIR, future detailed construction level plans, and environmental documents as the proposed project moves closer to implementation.

Sincerely,



Alice Angus
Community Development Director
City of Orange

Mr. Craig Miller
June 7, 2006
Page 3

cc: Gail Farber, Director of Public Works
Roger Hohnbaum, Assistant City Engineer
Gene Estrada, Water Quality
Anna Pehoushek, Principal Planner
Jennifer McDonald Le, Senior Planner/Environmental Review Coordinator
Sharon Baik, Environmental Planner
Bonnie Hagan, Interim Community Services Director
Pamela Galera, Community Services Project Coordinator

CHAPTER 3

Response to Comments

Comment Letter 1

Orange County Fire Authority

Comment 1-1

The comment requests that traffic safety mitigations be included as part of the project including upgrading traffic signals and electric vehicle access gates. No traffic lights or electric vehicle access gates are planned at this time. As a result, no additional mitigation to avoid affecting emergency response is necessary. For future projects, if gates or signals are planned, OCWD will coordinate with the Orange County Fire Authority to ensure that safety requirements are incorporated into the project.

Comment Letter 2

Department of Transportation District 12

Comment 2-1

The comment requests an additional storm water quality mitigation measure including avoiding tracking materials from the construction site, avoiding the rainy season if possible, and following Best Management Practices (BMPs). The PEIR identifies the need for storm water pollution prevention plan (SWPPP) BMPs for both the Anaheim Lake Expansion (mitigation measure M-HYDRO-1) and the Santiago Creek Expanded Recharge (mitigation measure M-HYDRO-2) projects as well as for future projects (RB-HYDRO-1 and RB-HYDRO-2). Mitigation measure M-HYDRO-2 limits construction in Santiago Creek to the non-rainy season. Furthermore, as noted on page 4.6-5, to protect air quality, trucks are required to be covered and street sweepers are required during construction to avoid tracking soil onto roadways. In response to the comment, additional BMPs will be added to mitigation measure M-HYDRO-2 for the Santiago Creek Expanded Recharge project:

M-HYDRO-2: The District will prepare and implement a Storm Water Pollution Prevention Plan as required for coverage under the statewide National Pollutant Discharge Elimination System construction permit. At a minimum, specific measures should include the following:

- Stockpiles of loose material shall be covered to prevent wind and water erosion and runoff diverted away from exposed soil.
- Concrete wash water will be collected and disposed of in the sanitary sewer.
- Fuel storage shall be within secondary containment
- Construction debris including broken concrete will be removed from the creek.
- Construction activities in the creek will not occur during the rainy season.
- Street sweepers will be employed during soil hauling activities to ensure soil is not tracked onto roadways.
- Soil haul trucks will be covered or two feet of freeboard will be maintained.

Comment 2-2

The comment notes that the PEIR should assess impacts to SR-22. The PEIR assesses the potential impacts to traffic resulting from the Santiago Creek Expanded Recharge project on page 4.11-2 noting that no construction activities would take place within Caltrans rights-of-way. Soil haul trips would be minimal. No new lighting, signage, or grading would be required within SR-22. The PEIR concludes that the project would not affect any Caltrans right-of-way.

Comment 2-3

The comment notes that a cultural resources report has been prepared by Caltrans for the subject property that is available for review by OCWD. OCWD appreciates notification of the availability of the report: *Historic Property Survey Report for the Santiago Creek Bike Trail Project, April 2005*. OCWD requested a copy of the report on June 14, 2006.

Comment Letter 3

Southern California Association of Governments

Comment 3-1

The comment states that the Southern California Association of Governments (SCAG) has no further comments. No additional response is necessary.

Comment Letter 4

California Department of Water Resources

Comment 4-1

The comment requests clarification on which projects would be under the jurisdiction of the Division of Safety of Dams. Two future storage reservoirs (Gypsum Canyon Reservoir and Aliso

Canyon Reservoir) evaluated at a programmatic level of detail in the PEIR would be subject to the Division of Safety of Dams based on their proposed heights. Both of these reservoirs will be evaluated at a greater level of detail prior to implementation. It is anticipated that these structures would be required to proceed with the appropriate reviews under the Division of Safety of Dams. None of the other projects would be subject to state jurisdiction. In response to the comment, the following paragraph has been added to Section 5.5.8 Hazards and Hazardous Materials section of the PEIR (page 5-23) discussing future storage reservoirs:

Off-river storage reservoir dam design and construction would be subject to the permitting requirements of the California Department of Water Resources Division of Safety of Dams. Future evaluation under CEQA would be required prior to project implementation.

Comment Letter 5

Orange County Sanitation District

Comment 5-1

The comment lists agreements between the Orange County Sanitation District (OCSD) and OCWD and requests confirmation that the project would not supersede these agreements. Approvals and rights granted through the projects evaluated in the PEIR are consistent with past agreements between OCWD and OCSD.

Comment Letter 6

Chino Basin Watermaster

Comment 6-1

The comment notes that the project does not involve any guarantees of flow beyond those identified in the 1969 Agreement. No further response is necessary.

Comment 6-2

The comment states that the 1969 Agreement guarantees certain flows at Prado Dam rather than at the Prado Dam conservation pool. OCWD concurs that the 1969 Agreement provides assurances to OCWD for certain flows that reach "Prado Dam." The conservation pool is operated by the US Army Corps of Engineers, under an agreement with OCWD as the local sponsor, to hold back flows that would otherwise pass through the dam during a peak flow event for subsequent recharge into the Orange County groundwater basin. The conservation pool is contiguous to and operated in conjunction with the dam.

Comment 6-3

The comment concurs with the cumulative analysis conclusions that include the Chino Basin. No response is necessary.

Comment Letter 7**Center for Biological Diversity****Comment 7-1**

The comment states that the PEIR fails to identify impacts and project alternatives that would avoid impacts. The comment requests that the water rights application be reduced to the amount of water usable with projects that have undergone full project-level CEQA review. See response to comment 8-1.

Comment 7-2

The comment questions the need and availability of water requested in the application stating that 505,000 afy is twice the amount currently available in the SAR. The comment states that 237,000 af is the greatest amount available for diversion. This assertion is incorrect. As noted on page ES-2, 237,000 afy is the maximum amount of native SAR water that OCWD has diverted in the past. Figure ES-1 shows that over 505,000 af passed through Prado Dam in two years since 1980. Table 3-1 identifies proposed projects that would increase OCWD's recharge capacity, allowing for greater diversion amounts from the river.

The need for the project is discussed on page 1-5, noting that local groundwater provides 67 percent of demand within the OCWD service area. The water availability assessment included as Appendix D of the PEIR estimates that flows will continue to increase in the SAR. The analysis incorporates the US Army Corps of Engineers hydrology analysis for the SAR watershed that uses a 30-year base period from which to estimate future flows. This base period adequately provides the hydrologic foundation for projecting future flows needed to design the Corps' flood control facilities as well as to determine future water availability.

The PEIR clearly states on page ES-1 that OCWD does not seek to compel the continued flow of increased water in the river, but rather would divert water when it is available. Contrary to a statement made in the comment, the 505,000 afy does not overlap or compete with any other water diversion request within the watershed. The water availability assessment contained in Appendix D of the PEIR (as well as the cumulative assessment contained in Chapter 7) evaluates future flows accounting for the full appropriation of all other pending and existing water rights requests within the watershed.

Comment 7-3

The comment states that programmatic assessment of future projects violates CEQA. However, CEQA Guidelines Section 15168 encourages the use of a program EIR to evaluate a series of

individual actions that are characterized as one large project and are related as logical parts in the chain of contemplated actions. OCWD's anticipated future water diversion projects are evaluated in the PEIR (Chapter 5) at a programmatic level of detail pursuant to the *CEQA Guidelines*. These projects do not yet have designs specific enough to evaluate at a project level. The PEIR clearly states that future projects evaluated in the PEIR at a programmatic level of detail will undergo subsequent project-level analysis prior to implementation. This approach is appropriate pursuant to *CEQA Guidelines* Section 15168 in order to provide a more "exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action."

Comment 7-4

The comment states that mitigation measures identified for future projects are already required by law and that analysis is cursory and often deferred to a future date. Mitigation measures identified in Chapter 5 of the PEIR identify strategies needed to avoid or lessen potentially significant impacts associated with future projects. The inclusion of actions required by law, such as future permitting requirements, as mitigation measures does not make those mitigation measures inadequate or invalid. Compliance with permitting requirements and acquisition of additional data are appropriate strategies to be acknowledged in a programmatic assessment where project details have not been finalized. Project-specific technical studies can not be conducted until the future facility locations are identified. The PEIR acknowledges on page 5-20 that future storage reservoirs within State Parks and designated Natural Community Conservation Planning (NCCP) areas could result in significant impacts to land use and biological resources. These future storage projects are evaluated at a programmatic level of detail since specific designs have not yet been developed for the projects. Subsequent project-level CEQA analysis would be required prior to project implementation for all of the future projects.

Comment 7-5

The comment notes that the project could result in "take" of endangered or threatened species in violation of Section 9 of the federal Endangered Species Act. The PEIR clearly evaluates the project's potential impact on sensitive species in Chapters 4 and 5. The proposed diversions and two near-term projects (Anaheim Lake Expansion and Santiago Creek Expanded Recharge projects) are fully evaluated in Section 4.3. Mitigation measures M-BIO-1 through M-BIO-6 provide project-specific mitigation for these near-term projects to ensure that impacts to biological species would remain less than significant. For the Santiago Creek near-term project, the analysis concludes that the project would be beneficial to the local biological resources. Chapter 5 provides programmatic analysis of future projects. These future projects are addressed programmatically because, while they are potential long-term projects, they are not yet sufficiently designed to permit project-level analysis. The program-level analysis responds to the requirement in CEQA that projects be analyzed at the earliest feasible point in the planning process (see 14 CRR section 15004(b)). The analysis (page 5-20) does not identify any significant impacts but concludes that some future projects, particularly the proposed storage reservoirs, could result in significant impacts to sensitive species through the destruction of habitat. The programmatic mitigation strategies identified for future projects (mitigation measures RB-BIO-1 and RB-BIO-2) include a systematic approach of consulting with resource agencies and

developing project-specific measures to minimize project effects. The PEIR concludes that some impacts to sensitive species could occur depending on the future project location and design. Subsequent project-level CEQA analysis would be required prior to project implementation for all of the future projects.

Comment 7-6

The comment notes that CEQA requires impacts to be evaluated at the earliest possible time avoiding piecemeal implementation and that mitigation should not be deferred to a later date. The PEIR assesses OCWD's overall groundwater recharge program. Chapter 1 discusses the scope of the environmental analysis and the need for the program. The PEIR provides a project-level analysis of (1) OCWD's proposed diversion of up to 505,000 afy and (2) two near-term recharge projects. The PEIR further provides programmatic assessment of future projects proposed to accommodate additional diversions pursuant to Section 15168 of the CEQA Guidelines. As these future projects are designed, additional project-level CEQA evaluation will be conducted. This programmatic analysis provides for an early environmental review of the overall program precisely to avoid piecemeal analysis. Mitigation measures are identified to minimize identified impacts where possible. Furthermore, Chapter 8 provides an in-depth alternatives assessment, comparing the proposed project with reduced diversion capacity alternatives and the No Project alternative.

Comment 7-7

The comment states that the PEIR fails to adequately disclose, analyze, avoid, minimize, and mitigate the environmental impacts of the proposed projects. On the contrary, the PEIR provides a project-level analysis of (1) OCWD's proposed diversion of up to 505,000 afy and (2) two near-term recharge projects. The PEIR also evaluates at a programmatic level of detail future projects that would be implemented as part of OCWD's long-term groundwater recharge program. The programmatic-level of analysis provides decision makers with an overview of potential effects of construction and operation of a group of future projects. This type of early, broad analysis of a larger program is encouraged in Section 15168(b)(4) of the *CEQA Guidelines* in order to "consider broad policy alternatives and program wide mitigation measures at an early time when the agency has a greater flexibility to deal with basic problems or cumulative impacts." The PEIR identifies potential impacts of future projects and provides programmatic mitigation strategies to reduce adverse effects where possible. The PEIR concludes that some impacts of some future projects will potentially remain significant even after implementation of mitigation. The PEIR clearly points out that prior to implementation of future projects subsequent project-level CEQA analysis would be required.

Comment Letter 8

California State Water Resources Control Board

Comment 8-1

The comment states that a Programmatic EIR is insufficient to determine the environmental effects of granting a water right. The comment suggests that the SWRCB will have to limit approval of water rights to the amount that can be diverted and put to beneficial use with facilities that have undergone full project-level CEQA compliance. However, the PEIR appropriately uses the Programmatic EIR format pursuant to Sections 15165 and 15168 of the *CEQA Guidelines* and adequately complies with CEQA requirements to assess a long-term recharge program where future project details are not fully designed. It is important to note that the PEIR provides full project-level CEQA compliance for the appropriation of up to 505,000 afy from the SAR including assessment of direct, indirect and cumulative impacts to the river resources and the groundwater basin. This includes a project-level assessment of potential impacts to in-river resources including hydrology and water quality, downstream biological resources, and designated beneficial uses for diversion of the full 505,000 afy.

Future off-river projects that have not yet been fully designed include the following: 1) surface recharge projects, 2) sub-surface recharge projects, 3) enhancement of existing recharge basins, and 4) storage reservoirs. The PEIR provides program-level analysis for each of these project categories. The program-level impact assessment in Chapter 5 provides OCWD and SWRCB with the best available information on potential worse-case impacts of the planned future off-river projects in order to weigh the benefits of the recharge program with its potential adverse effects.

Chapter 5 of the PEIR concludes that future basin cleaning vehicles will not result in any adverse impacts. The PEIR concludes that future surface and sub-surface recharge basins could result in significant impacts to air quality during construction. OCWD will consider adopting a Statement of Overriding Considerations for this potential future effect associated with implementation of the future recharge projects. Chapter 5 of the PEIR concludes that under worse-case scenarios, construction of storage reservoirs could result in six potentially significant and unavoidable effects. OCWD will also consider a Statement of Overriding Considerations for these potential effects of future projects identified at a program level.

Chapter 8 of the PEIR concludes that the No Storage Reservoir Alternative would be the Environmentally Superior Project since it would avoid the potential significant effects associated with future storage reservoirs. Additional project-level CEQA analysis will be required for all future projects.

OCWD believes that the project-level assessment of (1) OCWD's proposed diversion of up to 505,000 afy and (2) two near-term recharge projects in this PEIR, coupled with the previously certified project-level CEQA analysis for existing facilities and the program-level analysis of potential impacts for future projects contained in this PEIR, provides the necessary environmental review required to approve the full amount of 505,000 afy requested in the application.

Furthermore, as the new recharge and storage projects are evaluated with project-level CEQA, OCWD's diversion capacity will continue to increase incrementally.

The comment requests clarification on how much water OCWD proposes to divert at each project listed in the PEIR and which facilities have undergone CEQA review. Table 3-1 of the PEIR summarizes the projects that OCWD proposes to implement to accommodate 505,000 afy of diverted SAR water. The table notes the diversion capacity and CEQA status for each project. Some modifications to the overall recharge program have occurred since the application was amended in 1998. To provide clarification of how Table 4a of the application is reflected in Table 3-1 of the PEIR, an additional matrix has been prepared as part of this response to comments Final PEIR (Table 2). Table 2 correlates the projects listed in Table 4a of the application with the projects assessed in the PEIR and clarifies CEQA compliance status for each project. The Table also provides notes explaining why changes have occurred since the application was last submitted.

As shown in Table 2, existing facilities that have undergone project-level CEQA compliance account for a maximum diversion capacity of 362,800 afy.¹ However, as OCWD continues to evaluate new recharge projects pursuant to CEQA requirements, this diversion capacity will continue to increase.

Comment 8-2

The comment states that the project description does not identify which points of diversion are used for each project. As shown in the revised Figure 2-8, Diversion #1 at River Road above Prado Dam diverts up to 150 cfs out of the SAR to OCWD's Prado Wetlands to reduce nitrate in and improve the quality of river water before being returned to the SAR above Prado Dam. Diversion #8 at Prado Dam represents OCWD's water conservation program with the ACOE to temporarily store water behind the dam and then release it back into the SAR below the dam for groundwater recharge at OCWD's percolation facilities. As shown in the revised Figure 2-9, Diversion Points 2 through 7 below Prado Dam comprise the diversion system that delivers SAR water to OCWD's recharge facilities both within the river bottom itself as well as off-river percolation basins. Table 2-5 of the PEIR identifies points of diversion and notes where the points divert to. Each new recharge project would utilize the existing diversion points from the SAR.

The comment states that the application identifies eight points of diversion whereas the PEIR identifies only six. The application identifies two additional points of diversion that were not included in Table 2-5. In response to this comment, Table 2-5 of the PEIR has been clarified to include these two existing diversion points.

The comment states that Table 4a of the application is different from Table 3-1 in the project description. In response to this comment, Table 2 has been prepared to correlate Table 4a of the application with the projects evaluated in the PEIR. See response to comment 8-1.

¹ This amount includes 36,000 afy for additional BCVs for which categorical exemptions will be adopted in 2006 as well as 25,800 afy for the existing CEQA-approved conservation pool diversion at point of diversion number 8.

Table 2: Comparison of Table 4a of Application with Tables 2-3 and 3-1 of PEIR

Projects Listed in Application A031174 (Table 4A)				Projects Listed in Draft EIR Tables 2-3 and 3-1			
PURPOSE OF USE ⁽¹⁾	DIRECT DIVERSION		STORAGE AMOUNT ⁽²⁾ AF Per Annum	PURPOSE OF USE ⁽¹⁾	DIRECT DIVERSION		STORAGE AMOUNT ⁽²⁾ AF Per Annum
	RATE ⁽³⁾ (CFS)	AMOUNT ⁽⁴⁾ (AF/Y)			RATE ⁽³⁾ (CFS)	AMOUNT ⁽⁴⁾ (AF/Y)	
CURRENT CONDITIONS				CURRENT CONDITIONS (Table 2-3)			
Deep Basins ⁽⁵⁾				Deep Basins ⁽⁵⁾			
Anaheim/Kraemer System	170	123,080	3,500	Anaheim/Kraemer System	280	91,800	
Burns/Santiago System	170	123,080	17,700	Burns/Santiago System	70	60,600	
Warner System	40	28,960	4,400	Warner System	130	16,200	
Santa Ana River Groundwater Recharge	100	72,400		Santa Ana River Groundwater Recharge	100	70,400	
Off River System Groundwater Recharge	20	14,480		Off River System Groundwater Recharge	65	11,000	
Wildfire/Water Quality Enhancement ⁽⁶⁾	100	72,400		Wildfire/Water Quality Enhancement ⁽⁶⁾			
Prado Dam Conservation (elev = 505)			25,800	Prado Dam Conservation (elev = 505)			25,800
SUBTOTAL	500	342,600	51,400	SUBTOTAL	645	250,000	25,800
NEAR-TERM PROJECTS				NEAR-TERM PROJECTS (Table 3-1)			
Deep Basin Cleaning Diversion ⁽⁷⁾				Deep Basin Cleaning Diversion ⁽⁷⁾			
Anaheim/Kraemer System (including Miller)	50	36,200		Anaheim/Kraemer System		36,000	
				Miller Basin		7,000	
				Weir Pond #3		8,000	
				Five Coves		8,000	
Burns/Santiago System		14,480					
Warner System	40	28,960					
Prado Dam (Conservation elev = 508)			6,800	Prado Dam (Conservation elev = 508) ⁽⁸⁾			10,000
				La Jolla Recharge Basin		9,000	
				Mira Loma Recharge Basin		10,000	
				Santiago Creek Expanded Recharge		3,000	
				Anaheim Lake Expanded Recharge		2,000	
				Santiago Creek Replenishment Program ⁽⁹⁾		10,000	
				River View Recharge Basin ⁽¹⁰⁾		4,000	
SUBTOTAL		75,640	6,800	SUBTOTAL		97,000	16,800
LONG-TERM PROJECTS				LONG-TERM PROJECTS (Table 3-1)			
Prado Dam (Conservation elev = 514)		23,600		Prado Dam (Conservation elev = 514)			23,600
Additional Recharge Basins	90	65,160		Additional Recharge Basins		78,000	
Gypsum Canyon Reservoir		30,000		Gypsum Canyon Reservoir		30,000	
Aliso Canyon Reservoir		30,000		Aliso Canyon Reservoir		30,000	
				Deep Basin Cleaning Device (BCV)		25,000	
				Burns and Bond Pits		10,000	
				Subsurface Collection/Recharge System		25,000	
				Deep Basin Filtration/Recharge		150,000	
				Recharge Galleries		505,000	
SUBTOTAL	800	65,160	68,800	SUBTOTAL		83,500	342,600
TOTAL				TOTAL			

1. The Purpose of Use for all diversions and storage is for groundwater replenishment for future domestic, industrial, commercial, and irrigation.
2. The Direct Diversion rate shown is a sustainable annualized flow rate. The instantaneous diversion rate for the Deep Basins is 1,000 cfs, but this rate is sustainable for only brief periods.
3. The Deep Basins recharge diverted SAR flows to the groundwater basin.
4. Not included in total Direct Diversions because flows are returned to SAR after treatment.
5. Storm flows captured for later release to the SAR for diversion downstream at recharge facilities when capacity becomes available. Recirculated Draft EIR evaluates several alternatives including 508 feet aml in non-flood season. However, preferred project is 505 feet aml in non-flood season 498 feet aml in flood season.
6. Amount analyzed in CEQA document.
7. The Santiago Creek Recharge Turnout and River View Recharge Basin have been implemented since the application was submitted.
8. A categorical exemption will be adopted for additional BCVs in 2006 similar to the previously approved BCVs. Implementation of the BCVs results in no adverse impacts, therefore the additional recharge volume is included in the total.
9. Includes 25,800 afy from CEQA-approved Prado Dam conservation pool diversion from point of diversion number 8.
10. Includes 25,800 afy from CEQA-approved Prado Dam conservation pool diversion from point of diversion number 8.

The comment states that Figure 2-9 is inconsistent with the engineering map in the application. Figures 2-8 and 2-9 have been modified to be consistent with the engineering map provided in the application. The revised figures are provided below. Figure 2-9 provides a graphic representation of the points of diversion downstream of Imperial Highway. Figure 2-8 provides a graphic representation of the location of points of diversion upstream of Prado Dam. The exact latitude and longitude of each diversion is correctly identified in Table 3b of the application.

**TABLE 2-5
OCWD EXISTING DIVERSION POINTS**

	Diversion Point	Diversion Structure	Capacity (cfs)	Diverts to
1	River Road ¹	Six 36-inch tubes and gates	150	Prado Wetlands above Prado Dam
2	Imperial Inflatable Dam	Inflatable Dam/Headgates	550	Off-river recharge facilities
3	Below Lakeview	Four 30-inch tubes and valves	100	Off-river recharge facilities
4	Below Tustin Avenue	Four 36-inch diameter tubes and valves	80	Off-river recharge facilities
5	East of Glassell Street	Four 36-inch tubes and valves	140	Off-river recharge facilities
6	Five Coves Inflatable Dam	Inflatable Dam	500	Off-river recharge facilities
7	<u>Diversion through SAR bottom</u>	<u>River bottom</u>	<u>300</u>	<u>Orange County Groundwater Basin</u>
8	<u>Diversion at Prado Dam (conservation pool)²</u>	<u>Numerous inlets into conservation pool</u>	<u>20,000³</u>	<u>Conservation pool</u>

¹Water diverted at River Road is returned to SAR channel above Prado Dam.

²Water diverted (stored) at Prado Dam is returned to SAR channel below Prado Dam.

³Capacity accounts for instantaneous rate flow during storm event.

SOURCE: Orange County Water District.

Orange County Water District.

The comment states that inconsistencies between the application and the PEIR will require modifying the application. The inconsistencies between the application and the PEIR are minor and represent updated information made available since the application was submitted in 1998. The primary difference is in the estimated diversion capacity of the existing recharge system. Table 4a of the application provides overly optimistic recharge capacities for existing facilities (362,000 afy). Since 1998, OCWD has developed a better understanding of the recharge capacity limitations of these existing facilities. A more realistic assessment of existing recharge capacities is provided in Table 3-1 of the PEIR (250,000 afy). To compensate for this reduction in estimated existing recharge capacity, Table 3-1 in the PEIR includes near-term and long-term projects that OCWD is developing to accommodate as much SAR water as possible. The sum total for these new projects (505,000 afy) is slightly less than requested in the application (506,800 afy).

The comment requests that the pipeline leading from Burris Pit to the Santiago Basins and Santiago Creek recharge facility be shown as a point of rediversion. Figure 2-9 has been modified to show that the Santiago Pipeline constitutes a point of rediversion.

Comment 8-3

The comment notes that the full amount of water requested in the application (506,800 afy) would not be available in most years due to annual precipitation variations. OCWD concurs with this

assessment. The PEIR acknowledges in Section 4.2 and in Appendix D that the hydrology on the SAR varies year to year depending on local precipitation. The PEIR notes on page ES-1 "...to the extent that such water does reach Prado Basin, OCWD plans to implement projects to put that additional water to beneficial use..."

The comment notes that the amount of water available for diversion may depend on impacts to beneficial uses downstream of the diversion points. The PEIR has adequately evaluated at a project level the potential effects to beneficial uses of the SAR (page 4.2-11 and 4.2-21). No effects were identified. The PEIR notes on page 4.2-21 that the project would not change the existing condition. Furthermore, the PEIR notes on page 4.2-21 that "the total volume of water reaching the ocean annually has steadily increased over the last three decades." This is due to increased upstream urbanization. The PEIR notes on page 4.2-20 that the SAR channel below the OCWD points of diversion has been dry during the summer period since the USGS began keeping stream gage records in 1923. This condition would remain as OCWD diverts the increasing base flow. The increased diversions proposed by OCWD would not affect designated beneficial uses in the river channel.

Comment 8-4

The comment states that the PEIR does not address potential contamination plumes that could affect groundwater quality. Chapter 5 of the PEIR discusses the potential for siting future recharge projects in areas near existing soil contamination that could adversely affect groundwater quality. The PEIR notes on page 5-2 that surface recharge basins could affect existing contamination plumes. Mitigation measure RB-HYDRO-5 commits OCWD to conducting phase I site assessments of prospective new recharge basin locations to identify soil contamination. OCWD would not install a recharge basin in areas where soil contamination could affect groundwater quality.

New contamination plumes could affect groundwater quality in the future in areas near recharge basins and in other areas. OCWD supports RWQCB efforts to remediate contamination plumes effectively to minimize contamination. OCWD maintains a proactive groundwater monitoring program to assess groundwater quality throughout the Orange County Groundwater Basin. Monitoring data collected through this program helps protect groundwater resources and has identified localized shallow areas of the basin with groundwater contamination. OCWD is implementing cleanup and containment programs to address these areas of localized groundwater contamination. OCWD works closely with the RWQCB, County of Orange, and California Department of Toxics Substances Control to address areas of groundwater contamination. The District has a long-standing commitment to protect water quality and would not operate a recharge facility in a manner that would impair beneficial uses of the groundwater basin.

Comment 8-5

The comment asserts that beneficial uses of the SAR downstream of OCWD's points of diversion have been adversely affected by OCWD's diversion activities. Chapter 2 of the PEIR provides a substantial volume of information regarding the development of the SAR. Flood control

improvements have significantly shaped the river channel downstream of OCWD's points of diversion. These improvements have been mitigated by the flood control agencies that implemented the channel improvement projects. The diversion of base flow has been occurring since well before OCWD was established in 1933. Furthermore, there is evidence to suggest that the lower river channel was dry during the summers before the 1850s. More water reaches the ocean annually now than during historic periods due to upstream wastewater discharges. Chapter 2 describes that summer flows reaching the ocean do not reflect the historic condition. Currently urban runoff is being captured in the channel near the I-405 overpass and diverted to the Orange County Sanitation District treatment plant in an effort to protect summer-time ocean water quality. The PEIR adequately assesses the potential effects of the proposed diversions on SAR beneficial uses and concludes that no impacts would occur.

Comment 8-6

The comment references a letter sent from SWRCB to OCWD on January 30, 2003, containing the *Guidelines for Biological Surveys to be Submitted to the State Water Resources Control Board Division of Water Rights for Assessing the Effects of Proposed Water Appropriations* (SWRCB Guidelines) and recommending four protocols for surveying sensitive plants and animal species. The comment requests clarification regarding how the biological surveys conducted for the PEIR are sufficient compared to the guidelines and protocols recommended by the SWRCB.

The PEIR on page 4.3-3 clearly describes the survey methodology used to assess potential impacts to biological resources. This approach is consistent with the survey requirements listed in the SWRCB letter. As suggested by the SWRCB Guidelines, initial records searches in the California Natural Diversity Database (CNDDDB) and CNPS Inventory of Rare and Endangered Vascular Plants of California were conducted to compile a list of potential special-status species in the project area. The records searches included species within all 7.5' USGS quadrangles that include the project area (for results see Table 4.3-2). This search range exceeds the five-mile search range for presence of sensitive species as defined in the SWRCB Guidelines. In addition, extensive literature reviews of historical and current biological surveys of the flora and fauna of the SAR watershed were conducted, as summarized in Chapter 4.3 of the Draft PEIR, including reviews of critical habitat designations. The results of the literature search are included in Tables 4.3-1 and 4.3-2.

Given the results of the records and literature searches, field surveys of the project area were conducted on three different dates. As recommended by the SWRCB Guidelines, the survey results described in Chapter 4.3 include descriptions of existing conditions upstream and downstream of the diversion points. The survey results indicated that the river segments affected by the proposed project (at and below OCWD's Main River System) did not contain habitat suitable to require application of the recommended protocol-level surveys for plants or animals. The protocol survey guidelines issued by the USWFS, CDFG, and NPS identified in the SWRCB comment letter would be required if there were any indication that sensitive species could be affected by the project. The recommended protocol-level surveys were as follows (updated web sites provided):

1. USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants, January 2000.
(http://www.fws.gov/ventura/es/protocols/botanicalsurvey_protocol.pdf)

Reconnaissance surveys determined that no portion of the project area is suitable for supporting sensitive plants. Thus, USFWS Guidelines for botanical inventories of sensitive species would not be necessary.

2. USFWS Survey Protocols (<http://www.fws.gov/ventura/es/protocols.html>)

Reconnaissance surveys determined that the project area does not contain suitable habitat for any endangered animal species. Thus, implementation of USFWS Survey Protocols would not be necessary.

3. CDFG Survey and Monitoring Protocols and Guidelines
(http://www.dfg.ca.gov/hcpb/species/stds_gdl/survmonitr.shtml)

Reconnaissance surveys determined that the project area does not contain suitable habitat for any endangered plant or animal species. Thus, implementation of CDFG Survey Protocols would not be necessary.

4. CNPS Botanical Survey Guidelines
(http://www.cnps.org/programs/Rare_Plant/inventory/guidelines.htm)

Reconnaissance surveys determined that the project area does not contain suitable habitat for any endangered plant species. Thus, implementation of USFWS Survey Protocols would not be necessary.

Comment 8-7

The comment states that since the project to raise the elevation of the conservation pool behind Prado Dam has not yet received complete CEQA review, the SWRCB may not be able to approve water rights for the increment of diversion associated with this project. Table 3-1 in the PEIR notes that the near term project of raising the conservation pool to 498 feet above mean sea level (amsl) during the flood season has not yet completed CEQA review. However, the project is fully analyzed in the EIS prepared by the US Army Corps of Engineers (ACOE), which evaluated several alternatives including a non-flood season elevation of 508 feet amsl. The preferred alternative analyzed in OCWD's EIR keeps the non-flood season elevation at 505 amsl (existing condition) and raises the flood season elevation to 498 feet amsl. The recirculated Draft EIR for the Prado Basin Water Conservation Feasibility Study (State Clearinghouse Number 2004051004) was recirculated on May 25, 2006. See response to comment 8-1. The OCWD Board is scheduled to consider certification of the EIR in August 2006.

Comment 8-8

The comment states that the cumulative impacts for the stretch of the river between Prado Dam and the concrete channel remain unclear. The PEIR evaluates direct impacts (Chapter 4) and

cumulative impacts (Chapter 7) of the proposed diversions on the river channel and concludes that no change to the river between Prado Dam and the ocean would occur other than a potential reduction of storm water reaching the ocean during peak flow events (see Executive Summary Table ES-1). No changes would occur to the river channel between Prado Dam and the first diversion point at Imperial Highway. The diversion of essentially all base flow by OCWD below Imperial Highway would not alter the existing conditions downstream of Imperial Highway to the ocean. The PEIR concludes that below Imperial Highway, the only change to the river system would be a slight decrease in storm flows that would otherwise reach the ocean during peak flow events. This increased diversion of some peak storm flow would be less than significant.

Chapter 7 of the PEIR evaluates potential cumulative impacts of the project including in the portion of the river between Prado Dam and the concrete channel. The PEIR concludes that the cumulative diversions in the SAR including proposed upstream diversions would not change existing conditions within the river from Prado Dam to the ocean, other than a slight reduction in storm water that would otherwise reach the ocean during peak flow events. The PEIR concludes on page 7-10 that the diversion of water from the SAR would not be considered significant since “peak flows will continue to reach the ocean during large storm events.” Appendix D provides a Water Availability Assessment that substantiates this conclusion.

The EIS prepared by the ACOE for raising the conservation pool elevation found no impacts to resources within the river channel downstream of Prado Dam. The USFWS-approved Biological Opinion for this project is included in Appendix M-11. Under future scenarios, the stretch of river from Prado Dam to Imperial Highway would experience a flow regime similar to existing conditions, generally less than 300 cfs during the summer with peaks up to 5,000 cfs or higher in the winter depending on precipitation and upstream urbanization.

The comment states that the cumulative impact analysis should be expanded to consider the effects of ACOE’s operation of Prado Dam for conservation and flood control purposes. The PEIR acknowledges (pages 7-8 and 7-11) that operation of the dam for flood control is part of the baseline condition of the river and has incorporated in Appendix L each biological opinion issued to the ACOE by the USFWS for flood control projects. This baseline condition includes the operation of the conservation pool under the ACOE’s existing Water Control Plan adopted in 1992. Future modifications to the conservation pool will undergo CEQA review for direct and cumulative effects to the Prado Basin as well as to lower stretches of the SAR.

Comment 8-9

The comment requests that more information regarding the La Jolla Recharge Basin be included in the PEIR. The PEIR evaluates diversion of up to 505,000 afy and two near term projects at a project-level of detail. The La Jolla Recharge Basin—identified as a future near-term project in the PEIR—has undergone separate project-level CEQA review on a parallel course. The EIR for the La Jolla Recharge Basin was certified on May 17, 2006. The water to be diverted to the new basin is included in the total 505,000 afy requested in OCWD’s water rights application. The La Jolla Recharge Basin EIR adequately evaluated project-level impacts of constructing and operating a recharge basin, and correctly referenced this water rights PEIR to consider effects of

OCWD's overall diversion and recharge program. As noted in the PEIR, OCWD will continue to evaluate individual storage and recharge projects to augment recharge capacity up to 505,000 afy. This PEIR provides a programmatic evaluation of this long-term recharge program.

Comment 8-10

The comment states that OCWD will need to identify water rights on Santiago Creek and identify if the Santiago Creek Expanded Recharge Project would increase diversions of native water from the creek. As shown in Figure 2-9, SAR water is pumped from Burris Pit to the Santiago Basins that are located within the Santiago Creek channel. Native Santiago Creek water reaches the Santiago Basins as shown in the figure and is held for recharge. The State Water Resources Control Board issued a permit (Number 19325) to OCWD for use of up to 33,560 afy of water in Santiago Creek. The creek is generally dry in the summer time. Winter storm runoff is allowed to flow from the Santiago Basins to the SAR. The additional recharge capacity provided by the Santiago Creek Expanded Recharge project would only be effective during dry weather releases when SAR water is pumped from Bond Pit to the creek bed. No additional native Santiago Creek water would be diverted from the creek or otherwise recharged into the ground as part of the project.

Comment 8-11

The comment requests clarification on the amount of water OCWD claims are pre-1914 water rights. The water rights acquired from previous irrigation districts that are identified as the District's pre-1914 rights include the entire river flow. Each of the previous irrigation districts claimed rights to half the river flow. The comment is correct in stating that OCWD's application for 506,800 afy is inclusive of the water claimed under pre-1914 water rights.

Comment 8-12

The comment identifies discrepancies with the Appendices. The comment states that the Initial Studies for the Anaheim Lake Expansion Project and the Santiago Creek Expanded Recharge Project (Appendix I) are draft documents. These documents were prepared internally by OCWD to document the decision to prepare an EIR and to ensure that the information required in the CEQA Checklist was adequately addressed. The Initial Studies are not draft documents.

The comment notes that Appendix C references Appendix L in several places rather than Appendix M. These typographic errors have been corrected in the Final PEIR.

The comment notes that Appendices M-6 and M-11 are listed as including entire EISs, whereas they only include the Executive Summary and Biological Opinions. The entire documents were too lengthy to include as appendices in this document but are included by reference. The pertinent sections of the EIRs including the impact summaries and Biological Opinions are appended for easy reference. In response to this comment the title of the Appendices have been changed as follows:

M-6.1992: Excerpts from the Prado Dam Operation for Water Conservation, Final Report and EIS.

M-11.2004: Excerpts from the Prado Basin Water Conservation Feasibility Study, Main Report and Draft EIS/EIR.

Comment Letter 9

City of Orange

Comment 9-1

The comment requests to review more construction level documentation prior to implementing the Santiago Creek Expanded Recharge project. OCWD will submit draft design plans to the City and will coordinate closely with the City to address the City's concerns. Final design plans will be prepared after the City's comments on the draft design plans have been reviewed and addressed. OCWD anticipates receiving an encroachment permit from the City for the Santiago Creek Expanded Recharge Project and that the encroachment permit would provide an opportunity for the City to specify terms and conditions to address specific needs of the City.

Comment 9-2

The comment requests detailed designs for the Santiago Creek Expanded Recharge Project prior to issuing an encroachment permit. See response to comment 9-1.

Comment 9-3

The comment states that the PEIR does not adequately address flooding impacts. This comment is revised in a subsequent letter from the City. See response to comment 11-1.

Comment 9-4

The comment requests that OCWD share costs associated with storm permitting. This comment is revised in a subsequent letter from the City. See response to comment 11-2.

Comment 9-5

The comment requests detailed design drawings of the culvert to be constructed in Hart Park to better assess hydrology impacts. This comment is revised in a subsequent letter from the City. See response to comment 11-3.

Comment 9-6

The comment requests that an open, earthen-bottom culvert be installed rather than a pipeline. OCWD will coordinate project designs with the City. The City will approve final designs. The comment requests that a new mitigation measure be added to allow the City access over the trench. No mitigation is necessary. As the property owner, the City will maintain control over

access to the property and will be able to approve final conditions of the encroachment permit. The PEIR does not identify safety issues associated with the project that would require additional mitigation beyond the City's conditions of approval.

Comment 9-7

The comment requests that OCWD be responsible for maintaining water quality of the recharge water. The PEIR evaluates the quality of diverted SAR water on page 4.2-22. Impact HYDRO-4 notes that recharging water in Santiago Creek could transport contamination into the groundwater basin. Mitigation measures M-HYDRO-3, M-HYDRO-4, M-HYDRO-5, M-HYDRO-6 are identified to minimize the potential effect. The water flowing through the Hart Park parking lot will be of sufficient quality to protect the beneficial uses of the groundwater basin. The City is responsible for complying with storm water quality regulations including the County's Drainage Area Management Plan (DAMP) requirements. The addition of high-quality water in the creek throughout the year would not limit the City's responsibility to maintain storm water runoff quality within the Hart Park parking lot.

Comment 9-8

The comment requests clarification on the definition of base flow. Base flow is a term used in the 1969 Judgment to differentiate perennial river flows from storm flows within the Santa Ana River. Each year, the Santa Ana River Watermaster estimates annual base flow quantities in the river as required by the Stipulated Judgment. Base flow may consist of wastewater discharges, urban runoff, or other upstream contribution to the river during dry weather periods.

Comment 9-9

The comment states that the PEIR does not identify the potential impacts to the least Bell's vireo in the riparian portions of Hart Park. The PEIR identifies poor riparian habitat quality within the existing Santiago Creek near Hart Park. The PEIR notes on page 4.3-35 and 4.3-36 that increased water in the channel would improve riparian habitat quality thereby enhancing opportunities for native sensitive species to utilize the corridor. Construction would not affect existing riparian habitat. No nests or habitat potentially used by least Bell's vireo or other sensitive species would be removed or otherwise affected by the construction within the parking lot.

Comment 9-10

The comment requests additional support for arundo removal and habitat restoration. The PEIR notes on page 4.3-35 and 4.3-36 that increased water in the channel would improve riparian habitat quality thereby enhancing opportunities for native sensitive species to utilize the corridor. The PEIR also notes that OCWD is participating in on-going arundo removal programs within the creek. No additional riparian habitat restoration is planned as part of the project. OCWD is currently partnering with the Santa Ana Watershed Authority and the US Army Corps of Engineers to remove dead and dying eucalyptus and restore riparian habitat around the edges of Prado Basin. Twenty-four acres have been completed and 20 additional acres are in progress.

OCWD's Natural Resources Department is involved in ongoing restoration and arundo removal throughout the watershed.

Comment 9-11

The comment requests that signage be used to notify park users of disruptions to park and trail access. The PEIR on page 4.4-6 discusses temporary park and trail access disruption during construction. In response to the comment the following mitigation has been added to Impact LU-3:

M-LU-1: During the construction period within Hart Park the District will place signs identifying temporary parking areas and detours for trails and park access. The signs will indicate the duration the construction detours will remain in effect.

Comment 9-12

The comment requests that visual screens be used to screen construction activities from park users. The PEIR on page 4.5-2 discusses temporary aesthetic effects during construction. In response to the comment the following mitigation has been added to Impact AES-2:

M-AES-1: During the construction period within Hart Park the District will place visual screens such as fence lining around the construction zone.

Comment 9-13

The comment requests that air quality protection measures be implemented during construction. The PEIR (page 4.6-5) identifies the potential for construction-related emissions including dust to affect air quality and local sensitive receptors including nearby residences. The PEIR includes results of air emissions estimates in Table 4.6-3. The estimated emissions are well below thresholds of significance established by the South Coast Air Quality Management District. The emissions assume the following emissions control measures are implemented:

- Trucks hauling soil, sand and other loose materials, will be covered or maintain at least two feet of freeboard;
- Paved access roads, parking area, and staging areas at construction sites shall be swept daily with water sweepers;
- Streets shall be swept daily with SCAQMD Rule 1186 certified water sweepers (recommend water sweepers with reclaimed water) if visible soil material is carried onto adjacent public streets; and
- Speeds on unpaved roads shall be limited to 15 miles per hour for construction equipment.

No additional control measures are necessary to ensure protection of air quality. See response to comment 2-1.

Comment 9-14

The comment requests that notices be sent to local residences notifying them of the project. This mitigation measure is already included in the PEIR on page 4.9-7.

Comment 9-15

The comment requests that a qualified preservation architect review the project plans. This comment is revised in a subsequent letter from the City. See response to comment 11-4.

Comment 9-16

The comment requests that OCWD assume responsibility to replace under the City's supervision any damaged features of the historic Hart Park. Impact CULT-2 discusses potential effects to the historic park. In response to the comment, the following mitigation measure is added to the PEIR:

M-CULT-4: Following completion of the project, a qualified architectural historian shall conduct a survey of the Hart Park to determine whether construction damaged any architectural features of the park. The historian shall prepare a report to identify repair actions necessary to conform with the Standards for Treatment of Historic Properties identified in Section 96 of the National Historic Preservation Act (NHPA). OCWD shall implement the recommendations of the historian as necessary to comply with the NHPA. The City of Orange shall approve final repair activities.

Comment 9-17

The comment requests that a parking study be conducted to determine construction effects on parking availability within Hart Park. The PEIR identifies on page 4.11-2 that parking could be affected during construction within Hart Park. Mitigation measure M-TR-1 commits the District to obtaining an encroachment permit from the City that will include a traffic control plan. The traffic control plan will be prepared once construction details are determined and will identify temporary overflow parking opportunities.

Comment 9-18

The comment requests that signage be placed directing park users to overflow parking areas and also requests additional information on the number of parking spaces to be removed. The temporary construction area would be designed to minimize the number of parking spaces removed from service. The PEIR assumes that the construction period will be less than six months and that the number of parking spaces removed would not significantly affect access to the park. The project would not result in a reduction of permanent parking capacity. OCWD will work with the City in the permit approval process to identify temporary and permanent parking opportunities. See response to comment 9-11.

Comment 9-19

The comment requests that the District coordinate construction start date with the City. Mitigation measure M-TR-1 commits the District to obtaining an encroachment permit. OCWD will

coordinate with the City to identify the construction schedule as part of the encroachment permit approval. However, avoiding the entire summer will not be possible due to flood control restrictions in the winter.

Comment 9-20

The comment requests that OCWD construct a permanent road within the creek to provide access between parks. The PEIR identifies temporary access and parking restrictions to Hart Park (page 4.11-3). OCWD assumes that access to the park will not be entirely cut off at any time. Access to Hart Park from the parking lot will be maintained at all times.

Comment 9-21

The comment requests that a mitigation measure be added limiting construction period to daytime hours. The City of Orange noise ordinance is cited on page 4.9-3 of the PEIR. Impact NOISE-2 notes that construction would be required to comply with the noise ordinance. No additional mitigation is required.

Comment Letter 10

San Bernardino Valley Municipal Water District

Comment 10-1

The comment states that the diversion and recharge program described in the PEIR must be consistent with the 1969 Judgment. As discussed in Chapter 1 of the PEIR, the proposed diversions would be consistent with the 1969 Judgment.

Comment 10-2

The comment requests clarification on the OCWD diversion amounts in Figure 7-2 and Figure 4 of Appendix D. Figure 7-2 identifies that 313 TAF would be available for diversion whereas Figure 4 identifies 341 TAF during similar year-types and conditions. This discrepancy is due to different OCWD diversion assumptions made for each figure as noted in footnotes on each figure: Figure 7-2 assumes that water is diverted for flows under 3,000 cfs, whereas Figure 4 assumes water is diverted for flows under 3,500 cfs. Figure 5 of Appendix D estimates a conservative minimum volume of water that would reach the ocean assuming 3,500 cfs is diverted by OCWD. The comment is correct that the reader expects these assumptions to be similar for these graphics. In response to this comment, Figure 7-2 has been revised to show a 341 TAF diversion by OCWD, consistent with Figure 4 of Appendix D.

Comment 10-3

The comment requests clarification of a statement made on page D-4 of Appendix D. In response to this comment, the statement has been revised as follows:

As shown in Figure 6, assuming upstream diverters divert the maximum amount available, 100 percent of planned diversions along the SAR are implemented, at least 262,000 afy would continue to flow to the ocean.

Comment 10-4

The comment requests clarification for why Chino Basin diversions are different in Figure 4 and Figure 6 in Appendix D. The discrepancy is 27 TAF. This corresponds to the water right granted to Chino Basin in the mid 1990s. This amount is not included in Figure 4 since we assume this was not diverted in the water year 1992/93. This amount is included in Figure 6 since it estimates future year with and without projects that will include the already approved 27 TAF water right.

Comment 10-5

The comment provides corrections to the cumulative assessment table in Appendix J. The corrections concern updated reference notations. OCWD accepts these corrections. In response to the comment, these corrections have been included in the Final PEIR.

Comment Letter 11**City of Orange****Comment 11-1**

The comment supersedes comment 9-3. The comment requests that OCWD prepare a hydraulic study to ensure that flood risks are not increased. The PEIR concludes that the project would not create flood risks. The parking lot currently constitutes the bottom of the creek that is inundated during storms. The proposed project would not change this condition. The project design will ensure that flood flows are not directed to areas currently outside of the flood plain. These designs will be approved by the City prior to issuance of the encroachment permit.

Comment 11-2

The comment supersedes comment 9-4. The comment requests that OCWD partner with the City in identifying ways of enhancing storm water treatment. The project includes providing a bypass mechanism at Hart Park to increase percolation within the Santiago Creek. Storm water treatment is not a part of the project. Therefore, the comment does not relate to the project. Nonetheless, OCWD is very interested in discussing storm water treatment opportunities and potential opportunities for joint projects.

Comment 11-3

The comment supersedes comment 9-5. The comment notes that detailed design plans should be made available to the City. OCWD will coordinate with the City of Orange to obtain an encroachment permit. The City will be given plans to review as part of the permitting process.

Comment 11-4

The comment supersedes comment 9-15. The comment requests that a qualified preservation architect should review project plans to ensure historic resources are protected. Mitigation measure M-CULT-2 commits the District to retaining a qualified architect to review Hart Park and make recommendations to minimize effects. The comment also requests that a qualified architect supervise construction activities. In response to this comment mitigation measure M-CULT-2 has been modified to include oversight of construction by a qualified architect. See response to comment 9-16.

M-CULT-2: Prior to excavation, a qualified architectural historian shall conduct a survey of the Hart Park construction area. The historian shall determine the potential significance of the Hart Park parking area. The historian shall prepare a report to determine if the project would be in conformance with the Standards for Treatment of Historic Properties identified in Section 106 of the National Historic Preservation Act. The report will identify the significance of the parking area to be affected by the construction and recommend measures to minimize the potential impact. Measures may include minimizing the construction area to avoid construction impacts to side walls and access routes. The qualified architectural historian will provide oversight of construction activities as necessary to minimize impacts to historic resources.

CHAPTER 4

Summary of Modifications to the Draft PEIR

The following modifications are incorporated into the Final PEIR. Added language is shown as underlined text. Omitted language is shown as strike-out text.

Modification 1

Mitigation measure M-HYDRO-2 has been modified as follows:

M-HYDRO-2: The District will prepare and implement a Storm Water Pollution Prevention Plan as required for coverage under the statewide National Pollutant Discharge Elimination System construction permit. At a minimum, specific measures should include the following:

- Stockpiles of loose material shall be covered to prevent wind and water erosion and runoff diverted away from exposed soil.
- Concrete wash water will be collected and disposed of in the sanitary sewer.
- Fuel storage shall be within secondary containment
- Construction debris including broken concrete will be removed from the creek.
- Construction activities in the creek will not occur during the rainy season.
- Street sweepers will be employed during soil hauling activities to ensure soil is not tracked onto roadways.
- Soil haul trucks will be covered or two feet of freeboard will be maintained.

Modification 2

The following paragraph has been added to Section 5.5.8 Hazards and Hazardous Materials section of the PEIR (page 5-23) discussing future storage reservoirs:

Off-river storage reservoir dam design and construction would be subject to the permitting requirements of the California Department of Water Resources Division of Safety of Dams. Future evaluation under CEQA would be required prior to project implementation.

Modification 3

Table 5-2 has been modified as shown below:

**TABLE 2-5
OCWD EXISTING DIVERSION POINTS**

	Diversion Point	Diversion Structure	Capacity (cfs)	Diverts to
1	River Road ¹	Six 36-inch tubes and gates	150	Prado Wetlands above Prado Dam
2	Imperial Inflatable Dam	Inflatable Dam/Headgates	550	Off-river recharge facilities
3	Below Lakeview	Four 30-inch tubes and valves	100	Off-river recharge facilities
4	Below Tustin Avenue	Four 36-inch diameter tubes and valves	80	Off-river recharge facilities
5	East of Glassell Street	Four 36-inch tubes and valves	140	Off-river recharge facilities
6	Five Coves Inflatable Dam	Inflatable Dam	500	Off-river recharge facilities
7	<u>Diversion through SAR bottom</u>	<u>River bottom</u>	<u>300</u>	<u>Orange County Groundwater Basin</u>
8	<u>Diversion at Prado Dam (conservation pool)²</u>	<u>Numerous inlets into conservation pool</u>	<u>20,000³</u>	<u>Conservation pool</u>

¹Water diverted at River Road is returned to SAR channel above Prado Dam.

²Water diverted (stored) at Prado Dam is returned to SAR channel below Prado Dam.

³Capacity accounts for instantaneous rate flow during storm event.

SOURCE: Orange County Water District.

Orange County Water District.

Modification 4

Figure 2-8 has been modified as shown below:

Modification 5

Figure 2-9 has been modified as shown below:

Modification 6

The title of the Appendices have been changed as follows:

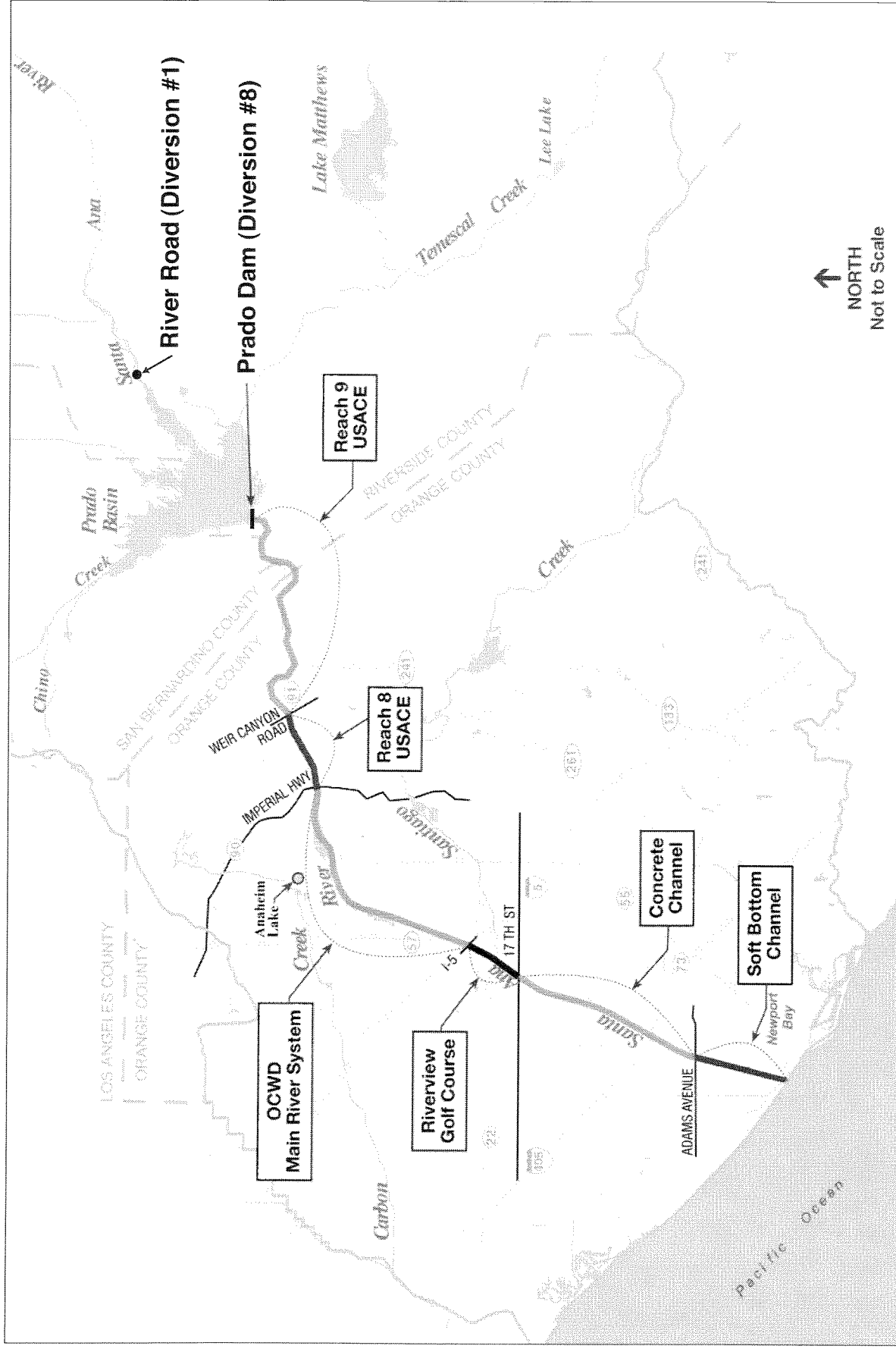
M-6.1992: Excerpts from the Prado Dam Operation for Water Conservation, Final Report and EIS.

M-11.2004: Excerpts from the Prado Basin Water Conservation Feasibility Study, Main Report and Draft EIS/EIR.

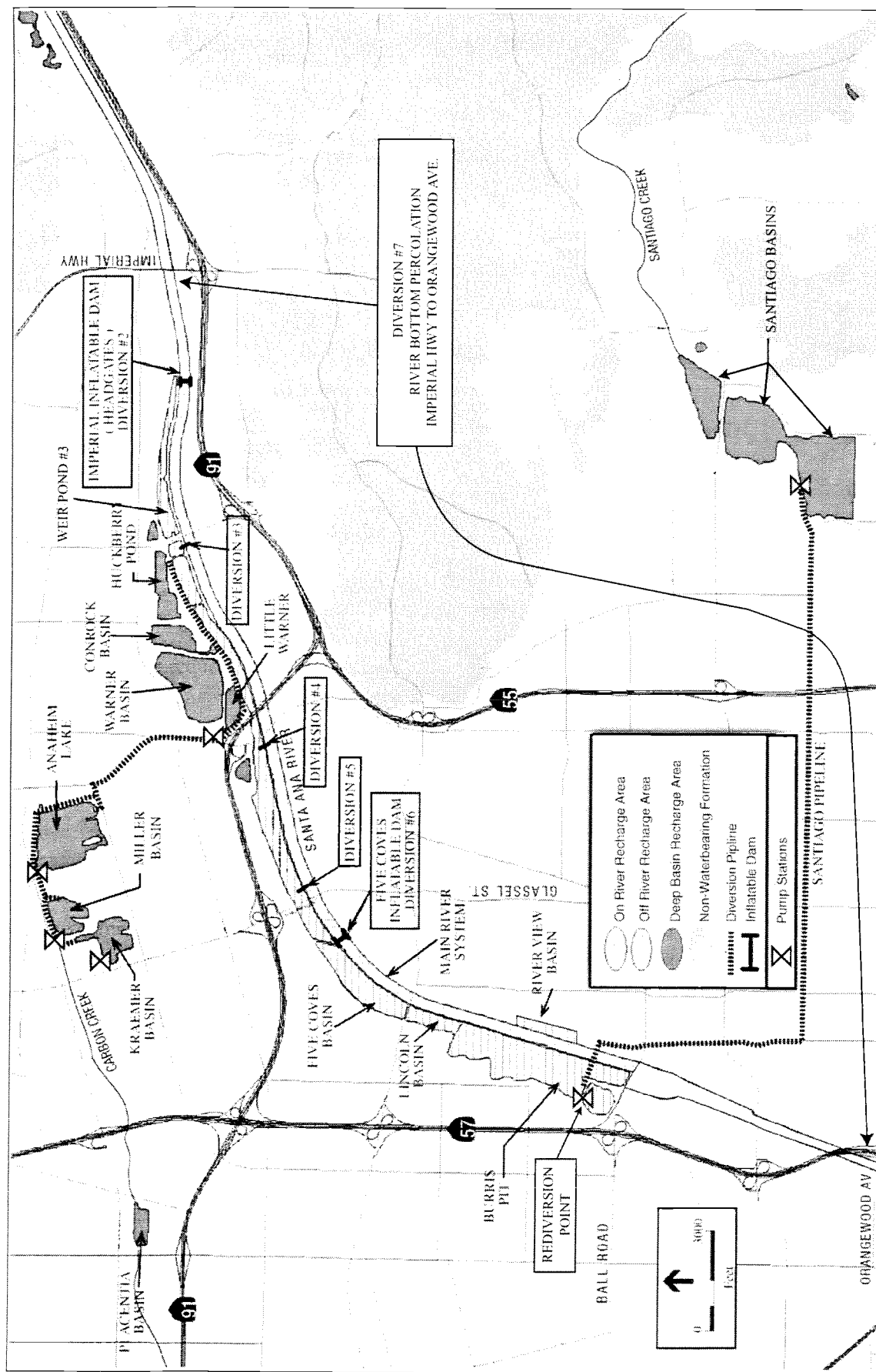
Modification 7

The following mitigation has been added to Impact LU-3:

M-LU-1: During the construction period within Hart Park the District will place signs identifying temporary parking areas and detours for trails and park access. The signs will indicate the duration the construction detours will remain in effect.



OCWD, 202291
Figure 2-8
 Lower Santa Ana River Watershed
 with Biological Study Reaches
 (Revised)



SOURCE: OCWD, 2005

OCWD . 202291
Figure 2-9
 Existing Recharge Facilities and Diversion Points

Modification 8

The following mitigation measure is added to the PEIR:

M-AES-1: During the construction period within Hart Park the District will place visual screens such as fence lining around the construction zone.

Modification 9

The following mitigation measure is added to the PEIR:

M-CULT-4: Following completion of the project, a qualified architectural historian shall conduct a survey of the Hart Park to determine whether construction damaged any architectural features of the park. The historian shall prepare a report to identify repair actions necessary to conform with the Standards for Treatment of Historic Properties identified in Section 96 of the National Historic Preservation Act (NHPA). OCWD shall implement the recommendations of the historian as necessary to comply with the NHPA. The City of Orange shall approve final repair activities.

Modification 10

The following changes to a sentence on page D-4 of Appendix D has been made as follows:

As shown in Figure 6, assuming upstream diverters divert the maximum amount available, 100 percent of planned diversions along the SAR are implemented, at least 262,000 afy would continue to flow to the ocean.

Modification 11

The suggested corrections to Appendix J have been included in the Final PEIR as follows:

- Under Air Quality, Upstream of Seven Oaks Dam to RIX-Rialto Effluent Outfall column, the following text is added: “(SAR DEIR, 6-56)”
- Under Air Quality, RIX-Rialto Effluent Outfall to Prado flood Control Reservoir column, the following text is added: “(SAR DEIR, 6-58)”
- Under Geology, Soils, and Minerals, RIX-Rialto outfall to Prado flood Control Reservoir column, the following text is added: “(NI)(SAR DEIR, 6-20)”
- Under Groundwater Hydrology and Water Quality, RIX-Rialto outfall to Prado flood Control Reservoir column, the following text is added: “(NI)(SAR DEIR, 6-29)”
- Under Hazardous Materials, RIX-Rialto outfall to Prado flood Control Reservoir column, the following text is added: “(NI)(SAR DEIR, 6-53)”

- Under Recreation, Upstream of Seven Oaks Dam to RIX-Rialto Effluent Outfall column, the following text is added: “Increase in number of zero flow days in river reach with generally little to no flow. (LTS)(SAR DEIR, 6-42)”

Modification 12

Mitigation measure M-CULT-2 has been modified to include oversight of construction by a qualified architect.

M-CULT-2: Prior to excavation, a qualified architectural historian shall conduct a survey of the Hart Park construction area. The historian shall determine the potential significance of the Hart Park parking area. The historian shall prepare a report to determine if the project would be in conformance with the Standards for Treatment of Historic Properties identified in Section 106 of the National Historic Preservation Act. The report will identify the significance of the parking area to be affected by the construction and recommend measures to minimize the potential impact. Measures may include minimizing the construction area to avoid construction impacts to side walls and access routes. The qualified architectural historian will provide oversight of construction activities as necessary to minimize impacts to historic resources.

**OCWD SANTA ANA RIVER APPROPRIATION
Mitigation Monitoring and Reporting Program**

**Prepared for:
Orange County Water District**

July 2006

OCWD SANTA ANA RIVER APPROPRIATION

Mitigation Monitoring and Reporting Program

Prepared for:
Orange County Water District

July 2006

707 Wilshire Boulevard
Suite 1450
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

Oakland

Orlando

Petaluma

Sacramento

San Francisco

Seattle

Tampa

202291

TABLE OF CONTENTS

OCWD Santa Ana River Appropriation Mitigation Monitoring and Reporting Program

	<u>Page</u>
Introduction	1
Anaheim Lake Expansion Project	2
Hydrology and Water Resources	2
Biological Resources	2
Cultural Resources	4
Santiago Creek Expanded Recharge Project	6
Hydrology and Water Resources	6
Biological Resources	10
Land Use and Recreation	12
Aesthetics	13
Cultural Resources	13
Hazard and Hazardous Materials	16
Noise	17
Traffic	18
Future Projects	19
List of Tables	
1 Future Projects Impacts and Mitigation Measures	19

MITIGATION MONITORING AND REPORTING PROGRAM

OCWD Santa Ana River Appropriation

Introduction

This Mitigation Monitoring and Reporting Program (MMRP) report includes mitigation measures identified in the Final Program Environmental Impact Report (PEIR) that are required to address impacts associated with the project. The impacts associated with this project and required mitigation measures are summarized in this program; the full text of the impact analysis and mitigation measures is presented in the OCWD Santa Ana River Appropriation PEIR. The PEIR analyzed the impacts for a number of proposed projects. This MMRP outlines the mitigation monitoring and reporting for these projects: (1) Anaheim Lake Expansion Project, (2) Santiago Creek Expanded Recharge Project, (3) Future Projects—Surface Recharge Basins, (4) Future Project—Subsurface Recharge Systems, and (5) Future Projects—Storage Reservoirs.

The MMRP is organized in a table format keyed to each impact and adopted mitigation measure. Each mitigation measure is set out in full, followed by a tabular summary of monitoring requirements. Monitoring requirements include implementation procedure, monitoring and reporting requirements, monitoring responsibility, and monitoring schedule. Implementation procedure is a checklist of actions required to successfully effectuate the mitigation measure. Monitoring and reporting action is a checklist of actions to successfully complete each implementation procedure. Monitoring responsibility names the responsible party for each implementation procedure and the associated monitoring and reporting action. Finally, the monitoring schedule outlines the phase of the project (e.g., project design, construction, operation, etc.) when each implementation procedure and associated monitoring and reporting action must occur.

Anaheim Lake Expansion Project

Hydrology and Water Resources

Impact HYDRO-2: Construction activities associated with Anaheim Lake Expanded Recharge could temporarily add sediment and pollutants to urban runoff and storm water runoff.

Mitigation Measure M-HYDRO-1: The District will prepare and implement a Storm Water Pollution Prevention Plan as required for coverage under the statewide National Pollutant Discharge Elimination System construction permit. At a minimum, specific measures should include the following:

- Stockpiles of loose material shall be covered to prevent wind and water erosion and runoff diverted away from exposed soil;
- Concrete wash water will be collected and disposed of in the sanitary sewer; and
- Fuel storage shall be within secondary containment.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Include preparation and implementation of a SWPPP, including measures in M-HYDRO-1 in the construction contract specification.	1. Keep SWPPP in the project file and at the work site. 2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	1. OCWD; construction contractor 2. OCWD	1. Prior to construction 2. During construction

Biological Resources

Impact BIO-1: The Implementation of the proposed project at Anaheim Lake could result in impacts to nesting cormorants, herons, egrets, raptors and other birds protected by the Migratory Bird Treaty Act.

Mitigation Measure M-BIO-1: The identified nesting trees will be removed outside the March 1 – July 31 breeding period. OCWD shall conduct pre-construction surveys for nesting birds within 30 days prior to removing the trees. The results of the surveys shall be forwarded to the USFWS and CDFG. If birds are found to be nesting in the trees to be removed during the survey, the tree removal will be delayed until the nests are no longer in use.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Retain a qualified biologist and perform pre-construction surveys.	1. Keep record of survey in the project file.	1. OCWD; qualified biologist	1. Prior to tree removal
2. Forward results of survey to USFWS and CDFG.	2. Keep record of mailings in the project file.	2. OCWD	2. Prior to tree removal
3. If any special-status bird species are identified during the survey, delay tree removals until nests are no longer used and have been verified by the biologist.	3. Keep record of delay and verification in the project file.	3. OCWD; qualified biologist	3. Prior to tree removal
	4. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	4. OCWD	4. Prior to tree removal

Mitigation Measure M-BIO-2: OCWD shall construct artificial nesting platforms, to replace the number of active nests present during the breeding season before the trees on the island are removed. See Payne and Copes (1990) for successful platform design.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Retain a qualified biologist to construct artificial tree platforms based on the number of nests found by the biologist within trees to be removed.	1. Keep record of construction in the project file.	1. OCWD; qualified biologist	1. Prior to tree removal
	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. Prior to tree removal

Mitigation Measure M-BIO-3: OCWD will consult with CDFG prior to removing nesting trees to determine what additional measures, if any, will be required to offset project impacts to the cormorant rookery.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Consult with CDFG to determine what additional measures, if any, will be needed to offset impacts to the cormorant rookery.	1. Keep record of consultation in the project file.	1. OCWD	1. Prior to tree removal
2. Incorporate CDFG requirements into construction contract specification.	2. Review construction contract to verify inclusion of appropriate provisions. 3. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD 3. OCWD	2. Prior to approval of construction contract 3. Prior to tree removal

Cultural Resources

Impact CULT-1: Implementation of the Anaheim Lake Expanded Recharge project could affect unknown, potentially significant prehistoric and historic resources.

Mitigation Measure M-CULT-1: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" will be instituted. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the District shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the District and the qualified archaeologist and/or paleontologist would meet to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
<ol style="list-style-type: none"> 1. If prehistoric or historic cultural resources are discovered, halt all work within 50 feet of the find and retain a qualified paleontologist or archaeologist to access significance of find. 2. In consultation with the qualified paleontologist or archaeologist, develop appropriate mitigation, including analysis, curation, and report development. 	<ol style="list-style-type: none"> 1. Keep record of assessment in the project file. 2. Keep record of mitigation in the project file. 3. Perform site inspections to verify contractor compliance. Add inspection records to the project file. 	<ol style="list-style-type: none"> 1. OCWD; qualified paleontologist or archaeologist 2. OCWD; qualified paleontologist or archaeologist 3. OCWD 	<ol style="list-style-type: none"> 1. During construction 2. During construction 3. During construction

Santiago Creek Expanded Recharge Project

Hydrology and Water Resources

Impact HYDRO-3: Construction activities associated with Santiago Creek Expanded Recharge temporarily could add sediment and pollutants to urban runoff and storm water runoff.

Mitigation Measure M-HYDRO-2: The District will prepare and implement a Storm Water Pollution Prevention Plan as required for coverage under the statewide National Pollutant Discharge Elimination System construction permit. At a minimum, specific measures should include the following:

- Stockpiles of loose material shall be covered to prevent wind and water erosion and runoff diverted away from exposed soil.
- Concrete wash water will be collected and disposed of in the sanitary sewer.
- Fuel storage shall be within secondary containment
- Construction debris including broken concrete will be removed from the creek.
- Construction activities in the creek will not occur during the rainy season.
- Street sweepers will be employed during soil hauling activities to ensure soil is not tracked onto roadways.
- Soil haul trucks will be covered or two feet of freeboard will be maintained.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Include preparation and implementation of a SWPPP, including measures in M-HYDRO-1 in the construction contract specification.	1. Keep SWPPP in the project file and at the work site. 2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	1. OCWD; construction contractor 2. OCWD	1. Prior to construction 2. During construction

Impact HYDRO-4: Increased recharge within Santiago Creek could transport contamination from surface soils in the area into the groundwater. Nearby production wells could be affected.

Mitigation Measure M-HYDRO-3: Prior to implementing the project, the District will conduct a Phase I Site Assessment for hazardous waste and soil contamination for the portion of the Santiago Creek between Hart Park and the SAR. The District will comply with recommendations contained in the Site Assessment to avoid transporting contamination.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Retain a certified environmental assessor to prepare a Phase I site assessment.	1. Keep Phase I report in the project file.	1. OCWD; qualified environmental assessor	1. Prior to construction.
2. Incorporate Phase I report recommendations.	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. Prior to construction

Mitigation Measure M-HYDRO-4: If the Site Assessment identifies the potential for contaminated soils to be transported by the project, the District will either redesign the project to avoid this area or remediate the contamination prior to implementation of the project such that no adjacent properties or the groundwater basin would be adversely affected.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. If Phase I report identifies contaminated soils to be moved, prepare a design change and/or remediation plan.	1. Keep record of design change and/or remediation plan in the project file.	1. OCWD; qualified environmental assessor	1. Prior to construction
2. Incorporate design change and/or remediation plan recommendations into the construction contract specification.	2. Review construction contract to verify inclusion of appropriate provisions.	2. OCWD	2. Prior to approval of construction contract
	3. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	3. OCWD	3. During construction

Mitigation Measure M-HYDRO-5: The District will notify the owners of active production wells within 500 feet of the lower reach of Santiago Creek between Hart Park and the SAR of the District's intent to recharge groundwater within Santiago Creek. In coordination with these well owners, the District will develop and implement a groundwater monitoring plan similar to the existing plan for the upper reach of the creek that will provide early detection of potential changes to groundwater chemistry resulting from the project. If the monitoring plan identifies adverse effects to water chemistry, the recharge operations causing the effect will cease. The results from periodic groundwater monitoring will be submitted to the RWQCB.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Conduct well survey to identify wells within 500 feet of the creek.	1. Keep copy of well survey in the project file.	1. OCWD	1. Prior to groundwater recharge
2. Notify active well owners.	2. Keep record of notification in the project file.	2. OCWD	2. Prior to groundwater recharge
3. In coordination with these active well owners, develop and implement a groundwater monitoring plan.	3. Keep groundwater monitoring plan in the project file.	3. OCWD	3. Prior to groundwater recharge
4. Periodically monitor groundwater chemistry within 500 feet of active wells.	4. Keep record of monitoring in the project file.	4. OCWD	4. During recharge operations
5. If adverse effects to water chemistry are identified, cease recharge operations causing effect.	5. Keep record of ceasing recharge operations in the project file.	5. OCWD	5. During recharge operations
6. Forward results of groundwater monitoring to RWQCB.	6. Keep record of mailing in the project file.	6. OCWD	6. During recharge operations

Mitigation Measure M-HYDRO-6: If adverse effects to groundwater quality caused by the recharge project are identified during groundwater monitoring, recharge operations will cease until the condition is resolved.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. If adverse effects to water chemistry are identified, cease recharge operations causing effect.	1. Keep record of ceasing recharge operations in the project file.	1. OCWD	1. During recharge operations
2. Coordinate with RWQCB and active well owners to recommend solutions to adverse effects of water chemistry.	2. Keep recommendations in the project file.	2. OCWD	2. During recharge operations
3. Incorporate recommendations into the groundwater recharge operational procedures.	3. Review operational procedures to verify inclusion of recommendations.	3. OCWD	3. During recharge operations.
	4. Periodically perform site inspections to verify compliance with revised operational procedures. Retain inspection records in the project file.	4. OCWD	4. During recharge operations

Biological Resources

Impact BIO-2: Implementation of the Santiago Creek Expanded Recharge project would occur within the creek bed subject to USACE, RWQCB, and CDFG jurisdiction.

Mitigation Measure M-BIO-4: Prior to construction within Santiago Creek, the District shall obtain a permit from the USACE pursuant to Section 404 of the CWA. The final permit shall be submitted to the SARWQCB in application for certification pursuant to Section 401 of the CWA.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Prepare a Section 404 permit package and submit to USACE.	1. Keep a copy of the permit package and record of mailing in the project file.	1. OCWD	1. Prior to construction
2. Obtain a final Section 404 permit and incorporate USACE requirements into the construction contract.	2. Keep a copy of the final Section 404 permit in the project file and review construction contract to verify inclusion of appropriate provisions.	2. OCWD	2. Prior to approval of construction contract
3. Prepare a Section 401 permit package (with final Section 404 permit) and submit to SARWQCB.	3. Keep a copy of the permit package and record of mailing in the project file.	3. OCWD	3. Prior to construction
4. Obtain a final Section 401 permit and incorporate SARWQCB requirements into the construction contract specification.	4. Keep a copy of the final Section 401 permit in the project file and review construction contract to verify inclusion of appropriate provisions.	4. OCWD	4. Prior to approval of construction contract
	5. Perform site inspections to verify contractor compliance with USACE and SARWQCB requirements. Retain inspection records in the project file.	5. OCWD	5. During construction

Mitigation Measure M-BIO-5: Prior to construction within Santiago Creek, the District shall obtain a Streambed Alteration Agreement from CDFG pursuant to Section 1600 et seq. of the California Fish and Game Code.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Prepare a SAA and submit to CDFG.	1. Keep a copy of the SAA package and record of mailing in the project file.	1. OCWD	1. Prior to construction
2. Obtain a final SAA permit and incorporate USACE requirements into the construction contract specification.	2. Keep a copy of the final SAA in the project file and review construction contract to verify inclusion of appropriate provisions.	2. OCWD	2. Prior to approval of construction contract
	3. Perform site inspections to verify contractor compliance with CDFG requirements. Retain inspection records in the project file.	3. OCWD	3. During construction

Mitigation Measure M-BIO-6: Prior to construction within Santiago Creek, the District shall consult with CDFG to determine any additional notifications or measures required to offset project impacts.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Consult with CDFG.	1. Keep record of consultation in the project file.	1. OCWD	1. Prior to construction
2. If necessary, prepare and mail additional notifications based on the consultation with CDFG.	2. Keep record of notifications and mailing in the project file.	2. OCWD	2. Prior to construction
3. If necessary, incorporate additional measures based on the consultation with CDFG into the construction contract specification.	3. Keep record of measures in the project file and review construction contract to verify inclusion of appropriate provisions. 4. Perform site inspections to verify contractor compliance. Add inspection records to the project files.	3. OCWD 4. OCWD	3. Prior to approval of construction contract 4. During construction.

Land Use and Recreation

Impact LU-3: The proposed Santiago Creek Expanded Recharge project could temporarily reduce the availability of recreational resources.

Mitigation Measure M-LU-1: During the construction period within Hart Park the District will place signs identifying temporary parking areas and detours for trails and park access. The signs will indicate the duration the construction detours will remain in effect.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate the above provision into the construction contract specification.	1. Review construction contract to verify inclusion of provision.	1. OCWD	1. Prior to approval of construction contract
	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. During construction

Aesthetics

Impact AES-2: Construction at Santiago Creek would pose temporary aesthetic impacts.

Mitigation Measure M-AES-1: During the construction period within Hart Park the District will place visual screens such as fence lining around the construction zone.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate the above provision into the construction contract specification.	1. Review construction contract to verify inclusion of provision.	1. OCWD	1. Prior to approval of construction contract
	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. During construction

Cultural Resources

Impact CULT-2: Implementation of the Santiago Creek Expanded Recharge project could affect unknown, potentially significant prehistoric and historic resources.

Mitigation Measure M-CULT-2: Prior to excavation, a qualified architectural historian shall conduct a survey of the Hart Park construction area. The historian shall determine the potential significance of the Hart Park parking area. The historian shall prepare a report to determine if the project would be in conformance with the Standards for Treatment of Historic Properties identified in Section 106 of the National Historic Preservation Act. The report will identify the significance of the parking area to be affected by the construction and recommend measures to minimize the potential impact. Measures may include minimizing the construction area to avoid construction impacts to side walls and access routes. The qualified architectural historian will provide oversight of construction activities as necessary to minimize impacts to historic resources.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Retain a qualified architectural historian to perform a survey of the Hart Park construction area and prepare a Section 106 report.	1. Keep a copy of the Section 106 report in the project file.	1. OCWD; qualified architectural historian	1. Prior to excavation
2. Incorporate Section 106 report recommendations into the construction contract specification.	2. Review construction contract to verify inclusion of appropriate provisions.	2. OCWD	2. Prior to approval of construction contract
3. As needed, the qualified architectural historian will provide oversight of construction activities.	3. Keep record of oversight in the project file.	3. OCWD; qualified architectural historian	3. During construction
	4. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	4. OCWD	4. During construction

Mitigation Measure M-CULT-3: Pursuant to *CEQA Guidelines* 15064.5 (f), “provisions for historical or unique archaeological resources accidentally discovered during construction” will be curated. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the District shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the District and the qualified archaeologist and/or paleontologist would meet to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. If prehistoric or historic cultural resources are discovered, halt all work within 50 feet of the find and retain a qualified paleontologist or archaeologist to access significance of find.	1. Keep record of assessment in the project file.	1. OCWD; qualified paleontologist or archaeologist	1. During construction
2. In consultation with the qualified paleontologist or archaeologist, develop appropriate mitigation, including analysis, curation, and report development.	2. Keep record of mitigation in the project file.	2. OCWD; qualified paleontologist or archaeologist	2. During construction
	3. Perform site inspections to verify contractor compliance. Add inspection records to the project file.	3. OCWD	3. During construction

Mitigation Measure M-CULT-4: Following completion of the project, a qualified architectural historian shall conduct a survey of the Hart Park to determine whether construction damaged any architectural features of the park. The historian shall prepare a report to identify repair actions necessary to conform with the Standards for Treatment of Historic Properties identified in Section 96 of the National Historic Preservation Act (NHPA). OCWD shall implement the recommendations of the historian as necessary to comply with the NHPA. The City of Orange shall approve final repair activities.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate mandatory damage repair to historic resources, as a result of construction, into the construction contract specification.	1. Review construction contract to verify inclusion of appropriate provisions.	1. OCWD	1. Prior to approval of construction contract
2. Retain a qualified architectural historian to perform a post-construction survey of the Hart Park construction area and prepare a report.	2. Keep a copy of the report in the project file.	2. OCWD; qualified architectural historian	2. After construction
3. If necessary, approve and implement the repair recommendations of the historian as necessary to comply with the NHPA.	3. Keep a record of approval and implementation in the project file.	3. OCWD	3. After construction
	4. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	4. OCWD	4. After construction

Hazards and Hazardous Materials

Impact HAZ-1: The Santiago Creek Expanded Recharge project could encounter soil during excavation that has been exposed to contamination.

Mitigation Measure M-HYDRO-3: Prior to implementing the project, the District will conduct a Phase I Site Assessment for hazardous waste and soil contamination for the portion of the Santiago Creek between Hart Park and the SAR. The District will comply with recommendations contained in the Site Assessment to avoid transporting contamination. See M-HYDRO-3 above for more information.

Mitigation Measure M-HYDRO-4: If the Site Assessment identifies the potential for contaminated soils to be transported by the project, the District will either redesign the project to avoid this area or remediate the contamination prior to implementation of the project such that no adjacent properties or the groundwater basin would be adversely affected. See M-HYDRO-4 above for more information.

Impact HAZ-2: Construction activities within Santiago Creek could result in spilling hazardous materials into the creek.

Mitigation Measure M-HAZ-1: No refueling of heavy equipment shall be conducted within the creek bed.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate the above provision into the construction contract specification.	1. Review construction contract to verify inclusion of provision.	1. OCWD	1. Prior to approval of construction contract
	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. During construction

Mitigation Measure M-HAZ-2: Drip pans shall be placed under heavy equipment within the creek bed when not in operation.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate the above provision into the construction contract.	1. Review construction contract to verify inclusion of provision.	1. OCWD	1. Prior to approval of construction contract
	2. Perform site inspections to verify contractor compliance. Retain inspection records in the project file.	2. OCWD	2. During construction

Noise

Impact NOISE-1: Implementation of the Santiago Creek Expanded Recharge project would temporarily increase noise in local areas.

Mitigation Measure M-NOISE-1: Prior to construction activities in Hart Park, notices will be sent to neighboring residences within a 1,000 foot radius of the construction area providing the planned construction schedule and including a contact number.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Prepare and mail a notice of construction to residences within 1,000 feet of an active construction area.	1. Keep a copy of the notice and a record of mailing in the project file.	1. OCWD	1. Prior to construction

Traffic

Impact TR-2: Construction activities for the Santiago Creek Expanded Recharge project could impact traffic flow and parking in Hart Park.

Mitigation Measure M-TR-1: Prior to construction, the District shall obtain an encroachment permit from the City of Orange. The encroachment permit will include a traffic control plan that will provide for temporary parking during construction.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Prepare an encroachment permit application (including a traffic control plan) and submit to the City of Orange.	1. Keep a copy of the permit and record of mailing in the project file.	1. OCWD	1. Prior to construction
2. Obtain a final encroachment permit and incorporate City requirements into the construction contract.	2. Keep a copy of the final encroachment permit in the project file and review construction contract to verify inclusion of appropriate provisions. 3. Perform site inspections to verify contractor compliance with City requirements. Retain inspection records in the project file.	2. OCWD 3. OCWD	2. Prior to approval of construction contract 3. During construction

Future Projects

Future projects analyzed at a programmatic level of detail in the PEIR included: (1) Future Projects—Surface Recharge Basins, (2) Future Projects—Subsurface Recharge Systems, and (3) Future Projects—Storage Reservoirs. Mitigation measures for future projects will need to be included in subsequent CEQA documentation. **Table 1** outlines the identified impacts and associated mitigation measures in the PEIR for Future Projects.

**TABLE 1
FUTURE PROJECTS IMPACTS AND MITIGATION MEASURES**

Impact	Mitigation Measure(s)	Future Projects		
		Surface Recharge Basins	Subsurface Recharge Systems	Storage Reservoirs
Future projects could result in significant impacts to storm water quality.	RB-HYDRO-1; RB-HYDRO-2	X	X	X
Future projects could result in significant impacts to groundwater quality.	RB-HYDRO-3; RB-HYDRO-4; RB-HYDRO-5	X	X	
Future projects could result in significant impacts to biological resources.	RB-BIO-1; RB-BIO-2	X	X	X
Future projects could conflict with existing land use designations and temporarily impact the availability of recreational resources.	RB-LU-1; RB-LU-2; RB-LU-3; RB-LU-4	X	X	X
Future projects could result in significant impacts to local aesthetic character.	RB-AES-1; RB-AES-2	X	X	X
Construction of future projects could result in significant air quality impacts.	RB-AIR-1; RB-AIR-2	X	X	X
Construction of future projects could result in significant impacts to cultural resources.	RB-CULT-1	X	X	X
Future projects could be subject to geologic hazards.	RB-GEO-1	X	X	X
Construction of future projects could result in significant noise impacts.	RB-NOISE-1; RB-NOISE-2	X	X	X
Construction of future projects could result in significant impacts to local traffic.	RB-TR-1; RB-TR-2; RB-TR-3	X	X	X
Construction of facilities could contribute to cumulatively significant impacts to air quality, noise, and traffic. Operations could add to cumulatively significant impacts to aesthetics, biological resources, and land use.	RB-AIR-1; RB-AIR-2; RB-NOISE-1; RB-NOISE-2; RB-TR-1; RB-TR-2; RB-TR-3			X

Source: ESA, 2006.

Mitigation Measure RB-HYDRO-1: The District will prepare and implement Storm Water Pollution Prevention Plans as required for coverage under the statewide National Pollutant Discharge Elimination System construction permit.

Mitigation Measure RB-HYDRO-2: The District will design facilities to be consistent with Orange County's storm water quality requirements.

Mitigation Measure RB-HYDRO-3: Prior to implementation of new recharge facilities, the District shall conduct groundwater modeling to evaluate the ability of the groundwater basin to accommodate the additional water at the specific recharge location. If modeling concludes that the basin can not accommodate the additional recharge, no recharge basins will be constructed in that area.

Mitigation Measure RB-HYDRO-4: The District shall continue to coordinate with the Department of Health Services and local water producers to effectively manage and maintain high water quality. The District shall continue water quality monitoring of recharge water to assess the potential for affecting groundwater quality. The District shall submit water quality monitoring results to the Department of Health Services. If monitoring identifies water quality concerns, OCWD shall coordinate with the Department of Health Services to develop and implement necessary water quality protection measures.

Mitigation Measure RB-HYDRO-5: Prior to implementation of new recharge facilities, the District shall conduct Phase I site assessments for each potential recharge basin prior to approval to assess potential for soil contamination to exist on site or in neighboring areas that could be affected by the project. If contaminated soils are identified the District will implement measures to prevent adversely affecting groundwater.

Mitigation Measure RB-BIO-1: The District will consult with resource agencies including the USFWS, the CDFG, the USACE, and the RWQCB to obtain necessary permits prior to implementation of projects that could result in disturbance to biological resources.

Mitigation Measure RB-BIO-2: The District shall implement a pre-construction mitigation strategy first to identify sensitive habitats, plants, and wildlife species, and then to avoid impacts if possible. If avoidance is not possible, the District shall minimize the impact and compensate in accordance with permitting requirements. This general mitigation strategy is summarized below.

- Determine if sensitive habitats or species are present: The District will retain qualified biologists to survey the project site for sensitive habitats, plants, and wildlife species.
- Avoid loss of sensitive habitats and species: The District will avoid disturbing sensitive biological resources, if possible. During project planning and siting, alternative locations or project configurations will be evaluated.
- Minimize loss of sensitive habitats and species: If avoidance is not possible, the District will limit construction activities in and around sensitive habitats and species to the minimum area necessary.
- Compensate for unavoidable loss of sensitive habitats and species: If avoidance is not possible, the District will compensate for the unavoidable losses in coordination with the USFWS and CDFG. Compensation for sensitive habitats and special-status plant

communities could involve either purchasing property with similar habitat or plant communities and providing for their protection and management for wildlife value in perpetuity, or enhancing sensitive habitat and plant communities within existing conservation areas.

Mitigation Measure RB-LU-1: The District shall conduct siting studies to determine the most suitable locations to place facilities. Siting studies shall consider existing and planned land uses in the vicinity of the project. Projects will be located in areas with suitable neighboring land uses wherever feasible.

Mitigation Measure RB-LU-2: If sensitive land uses cannot be avoided, buffer zones, access controls, and visual screens will be implemented to minimize impacts wherever feasible.

Mitigation Measure RB-LU-3: The District shall identify locations for project facilities that minimize impacts to recreational facilities.

Mitigation Measure RB-LU-4: For projects located near recreational areas, the District shall coordinate with the applicable recreation or park agency to identify ways to minimize impacts of project construction on recreational activities. Measures may include but are not limited to:

- Posting of signage indicating dates during which use of recreational areas would be restricted due to construction;
- Placement of fencing to isolate construction areas and allow continued use of other areas of recreational parks and facilities; and
- Timing of construction activities to avoid peak recreational use seasons.

Mitigation Measure RB-AES-1: The District shall design facilities to be consistent with local policies and programs to protect scenic values and to avoid visual intrusions.

Mitigation Measure RB-AES-2: The District shall incorporate landscaping plans into final designs of project facilities to mask views of new structures.

Mitigation Measure RB-AIR-1: The District shall establish best management practices (BMPs) to reduce air emissions from construction projects. BMPs may include measures such as restricting hours of use of construction equipment, minimizing idling, using fuel additives or alternatives in construction equipment, and implementing dust control plans.

Mitigation Measure RB-AIR-2: The District shall require contractors to comply with its BMPs and with SCAQMD emissions regulations.

Mitigation Measure RB-CULT-1: The District shall conduct archaeological and paleontological resource evaluations before and during construction activities as appropriate to minimize impacts to cultural resources.

Mitigation Measure RB-GEO-1: The District shall prepare site-specific, design-level geotechnical investigations for each site prior to the commencement of construction. Each investigation shall include an analysis of expected geologic hazards at the site and recommended measures to avoid the hazards. The investigations will include assessing liquefaction hazards to neighboring structures. The District shall include recommended measures necessary to avoid geologic hazards in design specifications.

Mitigation Measure RB-NOISE-1: The District will require contractors to comply with local noise ordinances.

Mitigation Measure RB-NOISE-2: The District shall implement procedures to reduce noise generation from project construction activities. Typical noise control procedures could include the following:

- Require construction contractors to comply with the construction hours and days limitations established in local noise ordinances. Night-time construction would require approval from local jurisdictions.
- Require all construction contractors to locate fixed construction equipment (e.g., compressors and generators) as far as possible from noise-sensitive receptors.
- Equipment used in the construction of individual projects and management actions shall be muffled and maintained in good operating condition. Internal combustion engine-driven equipment shall be fitted with intake and exhaust mufflers that are in good condition.
- Additional noise attenuating measures include changing the location of stationary construction equipment and/or staging areas; notifying adjacent residences and nearby sensitive receptors in advance of construction work; shutting off idling equipment; rescheduling construction activities; requiring on-going construction noise monitoring to assure adherence to City/County construction equipment standards; and/or installing temporary barriers around stationary construction noise sources.

Mitigation Measure RB-TR-1: The District will consult with local jurisdictions and Caltrans when considering future projects to develop measures to minimize impacts to traffic from construction activities. The District will implement these measures wherever feasible.

Mitigation Measure RB-TR-2: The District shall obtain encroachment permits from local jurisdictions and Caltrans prior to construction when construction would result in work within roadway easements or would require lane closures.

Mitigation Measure RB-TR-3: The District shall minimize heavy-duty truck traffic associated with soil hauling and deliveries during peak traffic periods.

For each of these impacts and their associated mitigation measures in Table 1, the following MMRP implementation procedure and monitoring reporting action will apply:

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Include requirements in subsequent CEQA documents.	1. Conduct CEQA review and maintain record of CEQA documentation.	1. OCWD	1. Prior to project approval